

NATIONAL FISHERMAN

SEPTEMBER
1957



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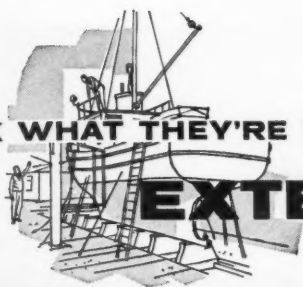
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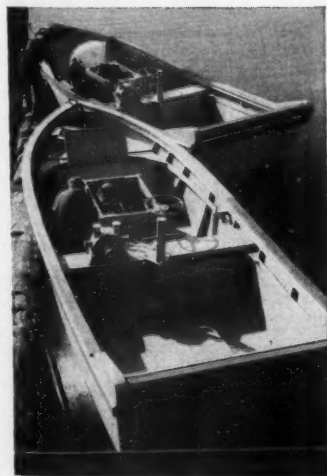


EXTERIOR FIR PLYWOOD

in marine construction and accessories



Overlaid fir plywood, used for deck, house and canopy construction on the *Agnes C.*, built in 1951 by Western Boat Building Co., Tacoma, Wash., proved so satisfactory that the same rugged material was chosen for similar uses on the *Western King* (left). This is the world's largest tuna clipper, recently completed by the same builder.



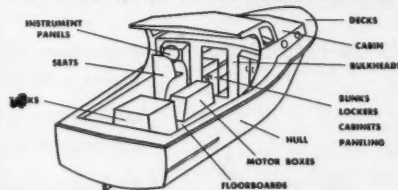
Exterior fir plywood saved 30% building time on these seine skiffs, by Kazulin-Cole Shipbuilding Corporation, Tacoma, Wash. The craft are lighter, stronger, last longer than former models. RIGHT: Fir plywood salt-brine fish well developed by Paul Autio, Astoria, Oregon, saved about 1/4 the cost of standard well, and licked the electrolosis problem.

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EXIDE-IRONCLAD BATTERIES**



Being interviewed is Curtice C. White, Senior Development Engineer.

"These channels actually cool the battery"

*At the Exide Laboratories—***Reporter:** First, Mr. White, tell me what makes a battery hot.

White: Heavy loads—they often raise battery temperature as much as 20 degrees.

Reporter: How do the channels cool it?

White: The heated electrolyte rises to the top through the channels. Plates are cooled by electrolyte coming up from the bottom.

Reporter: Don't all batteries have channels?

White: Unfortunately, no. It is the tubular construction of the Exide-Ironclad positive plate that leaves these channels on both sides.

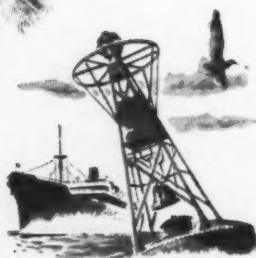
Reporter: What does this feature mean in battery performance?

White: Longer battery life, for one thing. The battery stays cooler. Has less incidence of hot spots. Plates operate at a more uniform temperature.

Reporter: Obviously this is an important feature of Exide-Ironclad.

White: Yes it is, but it's just one of many engineering details that contribute to its high capacity and long life.

Note to battery users: Whenever you order heavy duty batteries or the equipment that requires them, be sure to specify Exide-Ironclad. For detailed bulletin, write Exide Industrial Division, The Electric Storage Battery Co., Philadelphia 2, Pa.



THE ELECTRIC STORAGE BATTERY COMPANY

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NATIONAL FISHERMAN - SEPTEMBER, 1957

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NATIONAL FISHERMAN

The Fishing Industry Magazine

International Fishing Cost Study Desirable

An international meeting on costs and earnings in fishing is being planned for next year by the Food and Agriculture Organization (FAO).

Costs and earnings in fishing are the concern not only of individual fishermen and boat owners, but are receiving increased attention by governments and governmental agencies, industry organizations, and fishermen's unions and cooperatives.

The great part played today by governments in the maintenance and development of fishing industries, such as through subsidies, credit schemes, tax and duty remissions, price support and marketing schemes, has made studies of costs and earnings of paramount importance to them.

The industry also is interested in such studies as a basis for negotiation of contract prices, share agreements, minimum and maximum prices, and other business, according to F. E. Popper, Chief, Economics and Statistics Branch, FAO Fisheries Division.

Particular schemes are likely to favor, or discriminate against, certain groups and types of enterprises, and encourage or discourage the use of specific fishing methods and equipment. It is not always obvious which of these groups and types deserve to be favored, for instance, on account of superior earning capacity.

Investigations of costs and earnings in fishing enterprises have been undertaken in most of the important fishing countries, by governmental or industrial agencies. Those conducting the studies so far have benefited little from each other's experience.

It is the purpose of the proposed FAO technical meeting to enable interested parties to exchange views

and experiences, to become acquainted with methods used in the study of costs and earnings in various countries, to discuss the merits and applicability of such studies, and to compare the results.

A request for surveying the possibilities of Federal assistance for the United States fishing industry has been made by Senator Saltonstall of Massachusetts.

Based on recommendations recently advanced by a New England industry committee, Saltonstall has asked the Department of Interior to develop a plan that would provide Government aid in programs aimed at equalizing the cost of vessel construction and vessel insurance with that of foreign competition. The plan also would include provisions for eliminating the differential between cost of domestic production and the selling price of foreign import in the domestic market, with consideration of minimum operating prices to fishermen and vessel owners.

Saltonstall pointed out that the industry's pleas for higher tariffs had been denied, despite the fact that United States operators must compete with foreign industry which has lower costs and is subsidized by Government.

The FAO fishing cost meeting should shed some light on the competitive advantages and disadvantages that exist among fishing countries of the world. It may well point the way to constructive steps that could be taken by the United States Government to protect and promote its fishing industry. Domestic fishermen are not looking for unwarranted hand-outs, but they do want an opportunity to compete with foreign producers on a more equitable basis.

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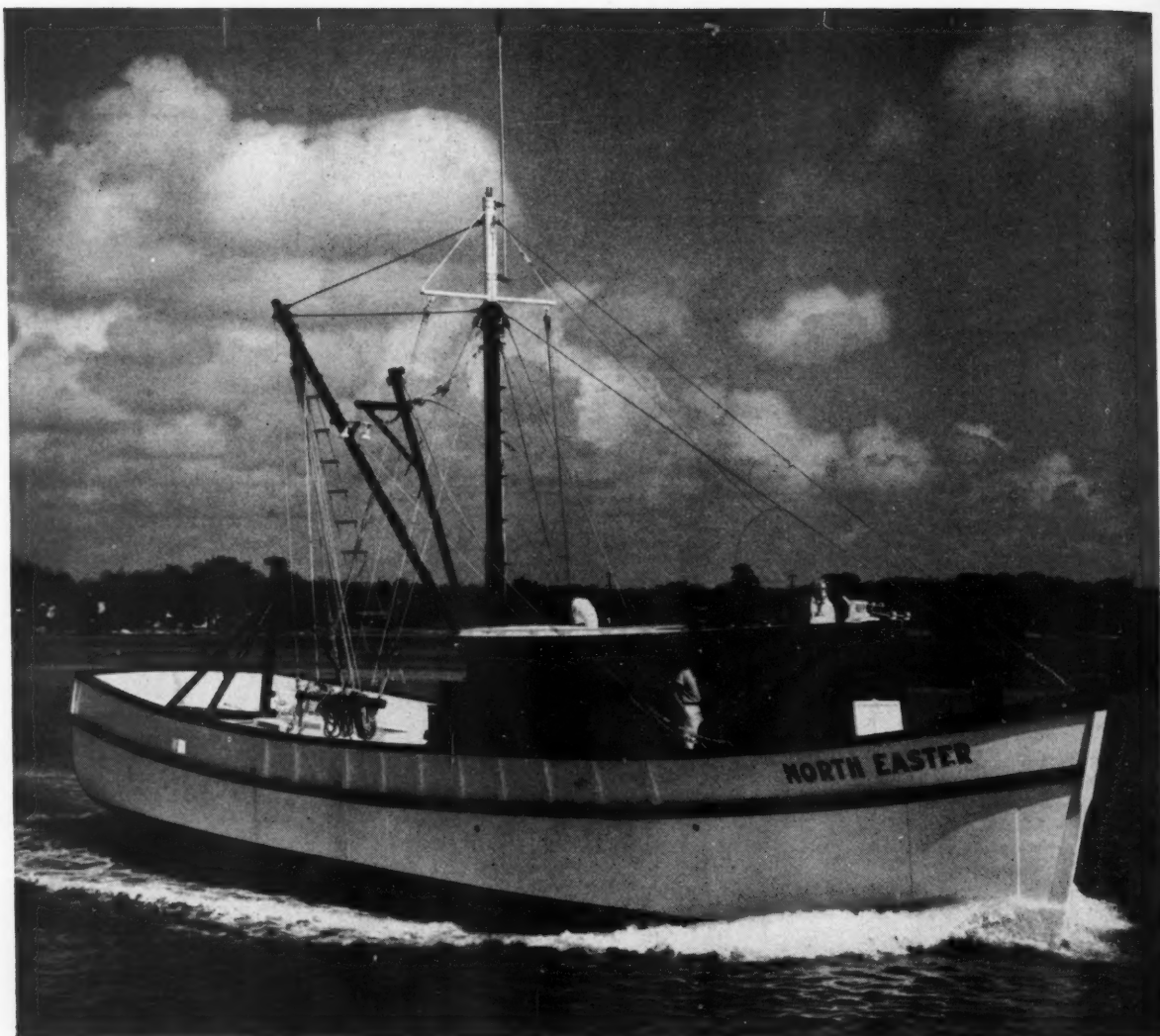


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FISHERY PROGRESS

► Funds For Vocational Education

Allotments of federal funds have been made to various states and territories for vocational education in the fishery trade and industry and distributive occupations. Congress appropriated \$228,000 for the program, although the original fact authorized an annual appropriation of \$375,000. The training program is under the direction of the Office of Education, Department of Health, Education and Welfare. The State Vocational Director for the individual States will be responsible for developing programs most beneficial to the commercial fishing industry, and in line with an equal state amount to match the federal funds.

► Senate Favors Loan Increase

A bill to amend the Fish & Wildlife Act of 1956, and to increase the Fisheries Loan Fund established under that Act was introduced by Senator Magnuson. The bill was passed by the Senate with an amendment providing an increase of \$3 million, rather than the \$10 million requested, and is pending before the House Merchant Marine and Fisheries Committee.

► Fishermen's Protective Act Down

A bill to broaden protection of fishermen on the high seas was reported by the Senate Interstate and Commerce Committee, and a companion bill, was reported by the House Merchant Marine and Fisheries Committee. However the Senate bill was objected to and passed over twice on the call of the calendar and also was laid aside without a vote on another occasion.

► Public Health Shellfish Manual

The United States Public Health Service has made available copies of the Revised "Manual of Recommended Practice—Sanitary Control of the Shellfish Industry", which contain the following changes: "Decks and/or storage bins (will be) so constructed and located as to prevent bilge water or polluted overboard water from coming into contact with the shellfish. Removable false bottoms will ordinarily be required in all small craft, including rowboats, skiffs, and power boats, used in the transport of shell stock."

"Shell stock should be washed reasonably free of bottom sediments and detritus as soon after harvesting as is practicable. The primary responsibility for washing rests with the harvester. Water used for shell-stock washing should be obtained from an approved growing area, or from other sources approved by the State regulatory agency."

► Salt-water Ice Tested

Equal quantities of salt-water and fresh-water ice were used to ice representative lots of haddock aboard the U. S. Fish & Wildlife Service vessel *Delaware*. Cooling rates, storage temperatures and keeping quality of the fish were determined.

Fish stored in salt-water and fresh-water ice were of excellent and good quality until the ninth day of storage and of acceptable quality until the thirteenth day. Fish stored in salt-water ice cooled faster and to a lower temperature than those in fresh-water ice. However, the salt-water ice melted faster and left the fish with less protecting ice. The fish in salt-water ice then rose to a higher temperature than those stored in fresh-water ice, showing, that in order to maintain fish in salt-water ice at a temperature close to the melting point of that ice, sufficient quantities of ice must be used to compensate for the faster melting.

► New Haddock Regulations

The Department of Interior has announced revised regulations governing the taking of haddock within Sub-area 5 of the Northwest Atlantic Ocean by trawl fishermen under the jurisdiction of the United States, becoming effective October 1, 1957.

Under present regulations, haddock fishermen operating off the coast of New England are required to use nets with mesh no smaller than four and a half inches, but fishermen seeking other species who incidentally catch haddock, are exempt from the net restriction, if their haddock take is less than 5,000 pounds or 10 percent of the total catch per trip. Under the revised regulations they can be exempt from the net size limit if the take of haddock in their operations does not exceed the 10 percent of all trawl-caught fish during any one year.

Cod fishermen for the first time are brought under the regulations and they will also be required to use nets with mesh no smaller than four and a half inches. Exemption rules similar to those for haddock will apply to taking cod incidentally to other species.

The annual exemption has been desired by a large number of New England trawl fleet operators who had difficulty in keeping within the trip exemption of 5,000 pounds or 10 percent, while their annual average catch of haddock was under 10 percent of their total annual take.

► Japanese-American Plan Cooling

Van Camp Sea Food Co., Star Kist Foods Inc., and the California

Marine Curing and Packing Co. announced plans August 20 for a \$700,000 promotion to get Americans to eat more tuna. The American firms were joined by representatives of three Japanese canneries.

On August 25 the joint advertising campaign appeared doomed with the withdrawal of the Van Camp Sea Food Co. Gilbert C. Van Camp Jr., president of the company, said his firm was withdrawing because the plan "would not be in the best interests of this company, the American fishermen, or the American tuna canning industry." He said he was convinced that the plan would be in violation of a Federal Trade Commission order forbidding combinations between American and Japanese tuna canners.

► Groundfish Imports Down 4%

During July 1954, imports of groundfish fillets and blocks amounted to 15.4 million pounds, representing a decrease of 666 thousand pounds or 4 percent compared with the same month last year, according to the U. S. Bureau of Commercial Fisheries. The principal cause for this decline was a 2.5 million pound drop in imports from Canada.

Imports of groundfish and ocean perch fillets and blocks into the United States during the first seven months of 1957 totaled 81.9 million pounds—a decrease of 700 thousand pounds with the corresponding period of 1956. Canada accounted for 74 percent of the total imports for that seven month period of 1957.

► Would Cut Japanese Tuna Import

Senator Warren G. Magnuson of Washington has introduced a bill which would sharply curb Japanese competition with United States tuna canners.

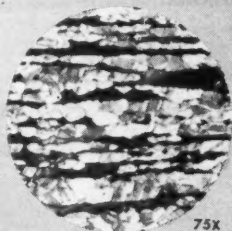
If enacted into law, the main results would be as follows: Duty on in-brine pack would be raised from 12½% to 45% ad valorem, the present rate for oil pack. The President would be directed to renegotiate present trade agreements that have resulted in the different duties for the two styles of packs.

Five percent or less of the average annual consumption of all tuna during the past five calendar years would be permitted to enter the country duty free. A quantity not in excess of 15%—or 100 million pounds, whichever is greater—would be assessed at 3¢ per pound. Everything over 15% of average consumption would be dutiable at 6¢ per pound.

Absolute quota of 25% of average annual consumption over the past five years—or 150 million pounds, whichever is larger—would be imposed. This would be figured on a round-weight basis and would apply to all tuna, whether canned, frozen or fresh.

The legislation is pending before the Senate Finance Committee.

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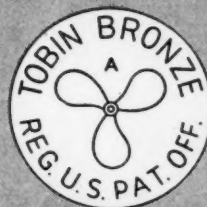


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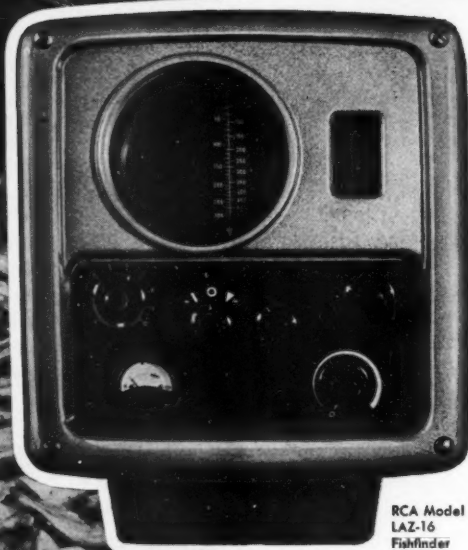
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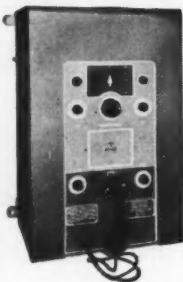
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OTHER RCA ELECTRONIC AIDS FOR THE FISHING FLEET



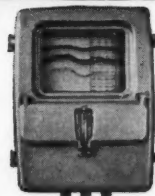
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Part of the shrimp fleet anchored in at Freeport, Texas.

A Critical Look at Shrimp Trawler Design

Edwin H. Mairs believes longer boats could be used to advantage; favors finer forward sections to reduce pounding, and aft deckhouse*

THE Southern shrimp fishery is still expanding in size of catch and scope of operations. In the past year, experimental work has discovered that shrimp can be found in deeper waters than those fished now—200 fathoms rather than 30 to 40 fathoms.

If the shrimp fishery is to be maintained and extended successfully, it is time for a change in the traditional fishing boat. It seems likely that the industry now is ready for the development of a new and larger trawler—80 to 90 feet long—properly designed, outfitted and engineered to meet the requirements of longer voyages and other changing conditions.

The vast bulk of the Southern shrimp fleet is composed of the Florida-type shrimp, a familiar sight on the Atlantic and Gulf Coasts from North Carolina to Mexico. Its high bow, pronounced sheer, and forward deckhouse give it a romantic, jaunty appearance, peculiar to its type.

From small beginnings in the early part of the twentieth century, the shrimp fleet has grown from a negligible number of motor boats, operating seasonally in bays and rivers, to an armada of 50-75' seagoing vessels, operating continuously on the inshore and offshore shrimp beds. The motor boats, two decades ago, numbered in the hundreds. The offshore vessels, today, number in the thousands.

The shrimpers are nearly all Diesel powered. Their rig is a standardized trawler rig, developed within the fishery and easily handled by a crew of from two to five men. Some of the larger vessels are outfitted and fueled to stay at sea for periods in excess of 60 days, and frequently do so when fishing the Gulf of Campeche.

The majority of the shrimpers are constructed of wood, although the use of steel is gradually gaining minor acceptance. A few are equipped with refrigeration equipment for processing and preserving the catch, but the average trawler depends on ice to hold the shrimp in marketable condition.

The Florida shrimp is so standardized in design, rig, lay-out and mechanical equipment that a crewman can easily change from boat to boat and be able to perform his work with but little time for acclimatization. As a model lending itself to mass production and standardization, the Florida shrimp is largely responsible for the tremendous growth of the South Atlantic and Gulf Coast shrimp fishery.

* Naval Architect of Coconut Grove, Florida, who conducted a survey of the design of Southern shrimp vessels and gear in 1955 for the U. S. Fish & Wildlife Service. This article by Mr. Mairs is based on material published recently in the "Bulletin of the International Oceanographic Foundation".

Based on Inshore Shrimper Design

As shrimping moved out of the bays and rivers to the inshore fishing grounds near the home ports, larger 35-40' versions of the old motor boats were built in order to cope with open sea conditions. A type developed which was based on the local fish boats of Northeast Florida; their construction was concentrated in Fernandina and St. Augustine, Florida. Their model and construction were greatly influenced by the Mediterranean and Southern European backgrounds of the fishermen who settled in these ports.

As the shrimp fishery grew and new fishing grounds were discovered farther and farther offshore, at greater distances from port, these inshore vessels were "blown up". Shrimpers as large as 75' in length were constructed, using similar molds, similar layouts, and identical spars and rigging. Diesel power became universal and power winches were installed for handling the fishing gear. Many of the attributes of the smaller vessels were lost in this process.

It is the opinion of many that the Florida-type shrimp over-reached its limitations when the 50'-60' lengths were exceeded. The additional length, beam, and carrying capacity developed some characteristics which affected the seaworthiness, ability of fish under adverse conditions, and the economical operation of these shrimpers.

Have Full Underwater Bow Sections

The typical 65-70 foot Florida-type shrimp has full underwater bow sections. Simplified planking developed a characteristic high bow which, contrary to common belief, is not an indication of seaworthiness, but only serves to hamper the visibility. The rounded sections and lack of adequate flare in the topsides result in a wet boat, which is subject to pounding and plunging in even moderate seas, due to lack of reserve buoyancy.

The mid and after sections of the Florida-type shrimp are very slack at the turn of the bilge, almost barrel-shaped, so that the boats are noted for their tendency to roll in a seaway, to the detriment of their fishing ability and the comfort of the crew. The lines aft, buttocks and diagonals, rise rapidly towards the transom, producing a squatting stern which not only affects the vessel's speed, but also causes trimming by the stern when loaded and when towing. The enlarged deckhouse almost prohibits communication between the wheelhouse forward and the working deck aft. As open winches are universally used,

(Continued on page 40)

Effect of Pulp Waste Disposal Aired at Pacific Oyster Convention

BELLINGHAM Hotel, Bellingham, Washington played host to the Pacific Oyster Growers Association's eleventh annual convention, August 15-17, where the principle attention was directed at the control of pollution of oyster beds by pulp and paper industry and the dangers of Japanese imports.

Officers of the Association re-elected for the coming year include: President, Lee J. Wiegardt, Wiegardt Brothers, Ocean Park, Wash.; vice-president, Edward J. Gruble, Hilton's Seafoods, Seattle, Wash. Charles R. Pollock of Seattle, Secretary, is starting his 20th year for the Association, while Malcolm B. Edwards, South Bend, Wash., is managing director.

New Board members elected were: Nat Waldrip, Waldrip Oyster Co., Richard Hicks, Z. F. Simmons Oyster Co., David C. McMillin, Olympia Oyster Co., all from the Olympia Shelton area of Washington; Earl Morgan, Turner and Morgan, Anacortes, Wash.; Chester Wachsmuth, Oregon Oyster Co., Portland, Ore.; William Gardiner, Crescent Oyster Co., Crescent Beach, B. C.

Automatically retiring from the Pacific Coast Oyster Growers Association Board of Directors under the rule requiring such retirement after 6 years of continuous service, are F. W. Mathias, Olympia, Wash.; Dr. C. R. Elsey, Vancouver, B. C.; Richard N. Steele, Blanchard, Wash.; and Malcolm B. Edwards, South Bend, Wash.

No Mills—Plenty Fish

State Fisheries Director Milo Moore discussed pollution of oyster beds by the pulp and paper industry. He disputed industry claims of waste disposal and pollution control efforts.

Moore said the State had planted fish in Nooksack, Skagit and other rivers, but "there are no fish." He declared that in the Green and "other rivers where there are no pulp mills, there are plenty of fish."

Mr. Moore asserted that if the same regulations applied to the pulp industry as to the oil industry, "it would cost \$10 a ton more to produce pulp."

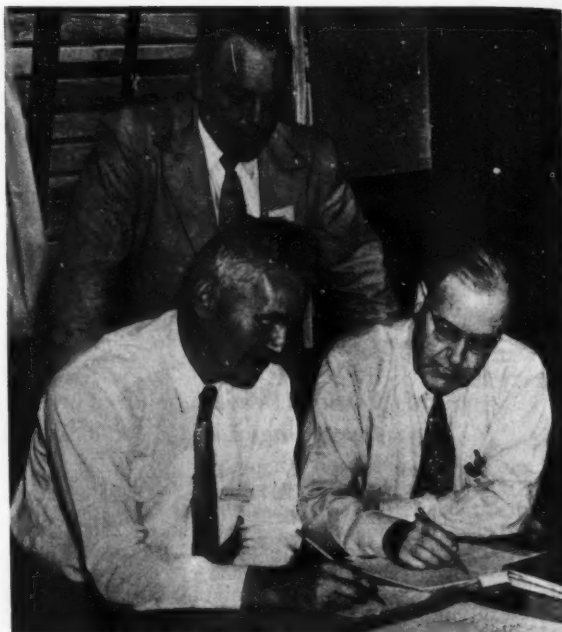
\$31 Million Spent By Pulp and Paper

"Pollution control by the pulp and paper mills of Oregon and Washington" was discussed by Vinton W. Bacon, executive secretary of the Northwest Pulp and Paper Association, Tacoma, Wash. He commented:

"A recent survey demonstrates the extent to which the pulp and paper industry has gone in its efforts to control wastes and to prevent pollution. During the last ten years, the industry has spent over \$31,000,000 for facilities which contribute to the elimination of wastes or to safe waste disposal practices where receiving waters must be used. Of this total, approximately \$9,000,000 was spent solely for the purpose of water pollution control.

"But, they must be operated efficiently if they are to achieve the desired end results. In order to keep tab on the operation of such equipment and on wastes, the industry has the equivalent of 40 full-time engineers, chemists, and technicians who do nothing but sample and analyze mill sewers, outfalls, and receiving waters. During the current year, over 125,000 separate tests are being made on mill sewers and receiving waters at a cost to the industry of over one-quarter of a million dollars.

"We believe that great strides have been made by the industry in preventing pollution. In fact, we have recently offered to the Washington Pollution Control Commission to sponsor and conduct a sampling and testing program of the receiving waters surrounding our installations, provided, that the terms of such monitoring are so specified and controlled by the pollution authorities



Pacific Coast Oyster Growers Association officials. Seated, Malcolm B. Edwards, left, Managing Director and Charles R. Pollock, Secretary-Treasurer. Standing, Richard N. Steele, retiring member, Board of Directors.

that there can be no question about the acceptance of the results.

"In order to make such a monitoring program meaningful, it will be necessary for the State to specify what is and what is not pollution. As (practical business people) you know that you do not invite the inspector in to take a good look at you if you do not sincerely and confidently believe that you are complying with the law. But, you expect to know the ground rules whereby such inspections are to be judged, and you expect the ground rules to be referenced to the things being protected.

"We believe that safe and reasonable water-quality standards can be set. The question as to what is a suitable and satisfactory condition has been with us for a long time, and extensive studies have been made by biologists and technicians with Government, educational institutions, private foundations, industry and others. Utilizing the results of their work, we believe that it is not only possible but that it behooves all of us to do the best that we can at the present time in developing and utilizing standards so that the oyster growers, the industry, and the general public will know where it stands today on the vital question of pollution control."

Two Year Study of Mill Wastes

In telling of research work affecting Pacific oysters, Malcolm B. Edwards, managing director of the Pacific Coast Oyster Growers Association, commented: "Through action of the Washington State Legislature a bill was passed which appropriated \$75,000 for a two-year study on the effects of sulphite mill wastes on oysters. The research is expected to yield valid answers to many of the complex problems involved in determining the effects of pulp mill wastes on oysters.

"The research is being conducted by the State of Washington Department of Fisheries under the direction of

Cedric Lindsay of the Shellfish Management Unit Advisory Committee. Meetings are being held with the Department of Fisheries at two-month intervals to help coordinate a pollution investigation program that will be acceptable to the majority of oyster growers and still be possible for the Washington Department of Fisheries to carry out. Initial reports indicate a wholehearted endorsement of the program to date.

"The basic marine pollution study by Oregon State College, Department of Fish and Game, started in July 1956. Part of the project is devoted to a study of the effects of kraft mill waste on oyster larvae. The work is going along very well, and techniques developed during the first year show a great deal of promise. The work is being financed by a Public Health Service Grant.

"The research work by the Department of Oceanography of the University of Washington on the oceanographic problems connected with pollution study is increasing. In the past year they have developed an automatic water sampler which has been installed in Hamersley Inlet near the Shelton Mill. Samples are drawn every hour which enables them to get a continuous picture of the water quality at the station.

Petition for Action

The oyster growers resolved to petition the Honorable Albert D. Rosellini and his Pollution Control Commission for the following action which is required under the terms of the Washington State Pollution Control Law:

1. That he declare Bellingham, Samish, Padilla, Fidalgo, Gardner and Commencement Bays and the waters contiguous to Shelton and Hoquiam, Washington, to be polluted areas by reason of the discharge of sulphite liquor from the pulp mills.
2. That the penalty required by law of \$100.00 per day be forthwith assessed against the offending pulp mills until they have corrected their pollution.
3. That the funds received from such penalties be used for comprehensive engineering studies to establish the exact degree and extent of the polluted areas.
4. That the Governor proceed forthwith to take other civil and criminal action as provided by the Pollution Law, against any pulp mill and its officers who fail to proceed in good faith to install the processes which are now available.

Effects of Japanese "Sterilized Contamination"

In discussing Japanese imports of oysters, Association President Lee J. Wiegardt said he felt that higher tariffs were not the answer, but that there should be a better public relations program to educate Americans to the "sterilized contamination" prevalent in Japanese foods.

The paper by David H. Wallace, director of the Oyster Institute of North America, stated: "Canned and smoked oysters from Japan and other Far Eastern countries are being imported into the United States in increasing quantities. These oysters are being grown, handled



The 50' x 16' oyster dredge "Pacific" owned by Pacific Oyster Co., Naselle, Wash. She is powered by two 90 HP General Motors 4-71 engines turning 32" x 27" twin propellers through 3:1 reduction gears giving a top speed of 10 knots. The "Pacific" has a draft of 3½' and is equipped with large wire baskets which are lowered port and starboard by booms.

and packed under conditions totally unacceptable under the 'Manual of Recommended Practice for Sanitary Control of the Shellfish Industry' which is published by the U. S. Public Health Service as a guide for enforcement of shellfish regulations by the various States. While our industry is working closely with the Public Health Service in strengthening the Manual and improving sanitary conditions, oysters are being sold in various parts of the United States without certification and with little or no technical supervision of growing areas or packing plants.

"We have been advised by the Food and Drug Administration that they have no authority to extend their inspections beyond the limits of the United States. They can only inspect the product upon landing to see if it meets the required fill of container and is superficially clean. Fortunately for the consumer, bacteria are destroyed by the heat process. At least we have a sterile product if not a clean one.

"The National Canners Association, Fisheries Products Division, has been working closely with us in developing the facts in this case. A cutting of several brands of Japanese canned oysters was made at the NCA technological laboratories under the supervision of their technologists. The pH was low, the odor was bad, the oysters were badly broken and the liquor was turbid with a greenish black color.

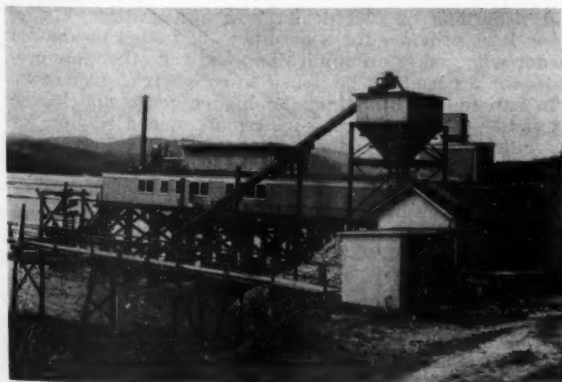
"Surveys show that canned oysters generally are not bought by brand. We are certain that a housewife after opening one of these products tested would not be a repeat buyer of this brand. In all probability she would not be a repeat for oysters, since she would assume all canned oysters were the same.

"One possible approach is that our canning industry start to advertise the fact that their product is domestically produced under the strictest sanitary controls. Another would be to promote specific brands in the same manner.

"It has been proposed facetiously that our industry should fight to have the sanitary regulations repealed so they would have a fair chance to compete. The idea is repulsive to our shellfish producers. They want to produce a product of which they can be proud and which will encourage consumers to buy again. Now they are faced with the prospect of a housewife buying canned oysters which are so bad she may decide to remove this item from her future shopping list.

"This is a serious problem needing joint consideration and action by the industry, States and Federal Government."

(Continued on page 38)



A typical modern oyster packing plant on the Pacific Coast, owned by Olympia Oyster Company, Oyster Bay, Wash.

New Fishery Law Suits Reviewed

By Leo T. Parker, Attorney at Law

DURING the past few months the higher courts have rendered several outstanding decisions affecting the fishing industry. These important decisions are reviewed briefly below. Readers will do well to clip this article for future reference because the imparted legal information will assist them to avoid similar legal controversies, and they and their lawyers can advantageously use the herein cited new higher court decisions to win unavoidable law suits.

Each Fish is Separate Offense

Considerable discussion has arisen from time to time over the legal question: If a State law specifies a penalty for illegal possession of fish, can the court inflict a separate penalty for each fish in possession of the person who violated the law? According to a late higher court decision, the answer is "yes."

For example, in *State v. Reed*, 63 N. W. (2d) 792, a State law was litigated which prescribed a penalty for illegal possession of fish, with intent to sell. The law set a fine of not less than \$10.00 nor more than \$100.00, or imprisonment in the county jail for not less than 10 nor more than 30 days, for each fish had in possession with intent to sell.

In subsequent litigation, the higher court held that the law is not restricted to a maximum penalty of \$100.00 or a 30-day jail sentence, no matter how many fish are involved, but expresses legislative intention to create a single offense involving one or more fish and to have the courts mete out punishment according to the number of fish possessed.

The court said: "A legislative intention to create a single offense involving one or more fish and to have the courts mete out punishment according to the number of fish possessed could hardly be more clearly expressed."

Fishing Boat Profits Are Speculative

Sometime ago I received a letter from a reader who asked: "If a fishing boat owner breaches his contract to sharesmen, can the latter sue and recover from the boat owner prospective profits?" Recently I located a higher court decision which clearly answers this legal question in the negative.

For illustration, in *Tobin v. Lower*, 236 Fed. (2d) 561, the testimony showed facts, as follows: A man named Tobin was the owner of the *Silver Spray*. He conceived the idea of conducting a tuna fishing venture in Southern California waters. Since he lacked the necessary funds to outfit such an operation, he placed advertisements in the *Seattle Times*, and other Northwest Coast papers, seeking to invest money on a working share arrangement or fishing lay. In this manner, Tobin contacted certain men named Lower, Herning and Peecher. Tobin represented to them that he was the owner of the *Silver Spray*, which was an 80' tuna clipper, and either was or would be equipped with live bait tanks and refrigeration, in order that it could leave Seattle for San Diego by May 15 to fulfill a tuna fishing contract with the Van Camp Sea Food Co. Induced by these representations, Lower, Herning and Peecher each paid considerable money for a working one-tenth share on the *Silver Spray*.

Soon afterward Tobin informed the crew that the *Silver Spray* would go to Alaska to haul a load of shrimp. This was to be in the nature of a shakedown cruise for the vessel and crew. On May 18, the *Silver Spray* left Seattle for Wrangell, Alaska. In some unexplained way the shrimp, which were to be taken aboard, were gone when the vessel reached Wrangell, and Tobin subsequently left the boat at Ketchikan and returned to Seattle. Thereafter, Tobin sent a wire to the *Silver Spray* directing its return to Seattle to make ready for the voyage south.

On June 3 the *Silver Spray* arrived in Seattle from Alaska. It appears that during the interim, Tobin had been making efforts to secure bait and refrigeration equipment in order to outfit the *Silver Spray* for tuna fishing. It became necessary to dry-dock the ship for repairs. Provisions were growing short and the affairs of the fishing lay were in a confused state. As a result, on June 10, Lower libeled the boat, her engines, tackle, apparel, furniture and equipment, and Tobin personally. Soon afterward Herning and Peecher filed suit.

The higher court held that failure of the tuna fishing venture was solely due to actions of Tobin, and the sharesmen were entitled to recover the respective amounts they expended for the working share agreement, together with a fair allowance for their time and service.

The court said: "Tobin, by his action in taking the *Silver Spray* to Alaska, abandoned the enterprise and precluded any possibility of successful performance of the original lay. The failure of the voyage to produce any catch was not attributable to natural causes, or fishermen's luck, nor to any factor that might be said to be embraced by the share contract. The failure was solely due to the actions of the owner (Tobin) and the sharesmen were without fault in the matter, having performed their agreement to the best of their ability and opportunity."

The higher court refused to award the sharesmen any prospective profits, and said: "It has been quite uniformly held that prospective profits from a fishing lay are too speculative and uncertain to be a proper measure of damages. Furthermore, there was no testimony as to the earning capacity of the *Silver Spray*."

Therefore, while the sharesmen (Lower, Herning and Peecher) may recover from Tobin the full amount of money paid to the latter, plus reasonable compensation for their time and services, the court will award no damages based upon the prospective profits that might have been earned if Tobin had fulfilled his original agreement to outfit the vessel and conduct the tuna fishing venture in Southern California waters.

State License Laws Upheld

Recently a higher court held that two State license laws are valid and effective, if one law specifies payment of license fees by a commercial fisherman and another State law specifies lower fees for all other persons.

For illustration, in *Naylor v. State*, 265 S. W. (2d) 831, State law 946 P. C. regulates the use of nets in the salt waters of the State by any person. Another State law, 934 P. C., authorizes State authorities to issue a license to any person engaging in the business of being a commercial fisherman or fish dealer. In other words, one of these laws provides for a permit to be issued to any net owner who makes an application, and the other law provides for a permit to be issued to commercial fishermen.

In subsequent litigation, the higher court upheld the conviction of a commercial fisherman, named Naylor, for his failure to secure a commercial fisherman's license under law 934 P. C. The fisherman contended that the two laws are ambiguous and that he was not subject to conviction, since he held a license under law 946 P. C.

The higher court said: "These laws are not contradictory and may exist at the same time, each being applicable to a different set of facts. The State may prosecute under Article 934 P. C. if it can prove that the operator of the unlicensed net is a commercial fisherman."

Hence, although a State law provides that "any person" can obtain a fishing license at a stated license fee, yet a commercial fisherman cannot use such license if another State law provides a higher license fee for a commercial fisherman.

New 38-Foot Steel Dragger

"Hawk" Has Large Hold

For Trash Fishing

THE 38' dragger *Hawk*, designed and built for Edward M. and Thomas F. Conlon of East Providence, R. I., by Gladding-Hearn Shipbuilding Corp., Somerset, Mass. was launched August 15, second anniversary of the shipyard. The vessel was christened by Miss Elizabeth Gladding, twelve-year old daughter of Preston R. Gladding, President and Naval Architect of Gladding-Hearn.

Based on the firm's first vessel, the *North Star* built for Capt. John Sisson, the *Hawk* will also sail out of Port Judith, R. I., and is the second steel trash dragger in the fleet.

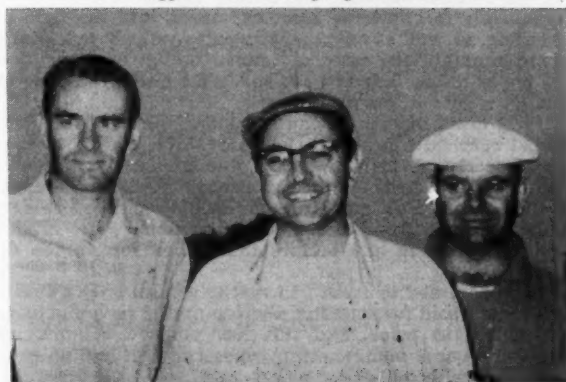
The *Hawk* has a beam of 12' and a depth of 6'. Steel plating on the bottom is 1/4" thick and 3/16" steel is used on the topsides and deck.

Featuring an exceptionally large fishhold—15' x 6' x 12'—amidships, designed to carry 40,000 pounds of fish, it is constructed with special framing to speed the discharge of cargo by the Fisherman's Cooperative hydraulic pumps. Portable dividing boards divide the fishhold into nine separate compartments or "pens" arranged so as to enable storing the fish for best stability and trim.

The engine and pilot house are well forward allowing maximum use of the space amidships for hold and spacious deck. The fo'c's'le provides galley and limited quarters for two. A lazarette at the stern provides stowage for fishing gear and two 150 gallon fuel tanks are forward of the fishhold.



The dragger "Hawk" undergoing builder's trials.

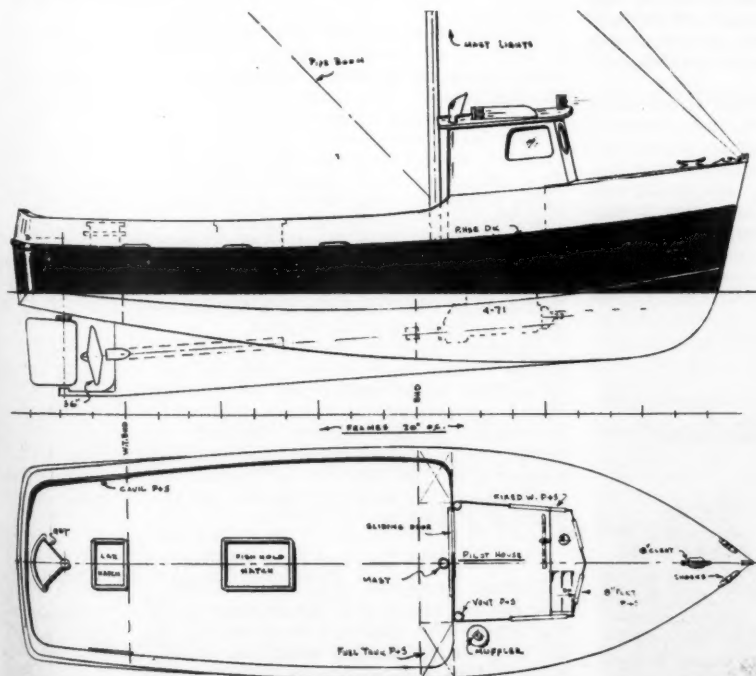


Left to right—Preston R. Gladding, president, Gladding-Hearn Shipbuilding Corp., Edward and Thomas Conlon owners of the R. I. trash fishing boat "Hawk".

Smooth handling and dry riding are permitted by an exceptionally fine bow with a generous flare and easy stern lines. The propeller and rudder have been kept forward to give exceptional maneuverability.

The *Hawk* is powered by a General Motors 4-71 Diesel driving a 36" by 24" Federal Propeller through a Twin-Disc 3:1 gear, 2" Monel shaft, wrought iron stern tube and Ryertex bearing. The 95 hp. Diesel engine, giving the vessel a speed of 9.5 knots, is cooled by fresh water keel cooling, eliminating the problem of corrosion due to salt water in the engine. An anti-freeze solution is used to prevent freezing and eliminate nightly draining. Power for the Hancock 2B all-steel winch is provided by a 2:1 front-end power take-off.

Other equipment on the *Hawk* includes Exide batteries Jabsco pumps, Wall rope, a Stewart Warner instrument panel, a Danforth anchor, a Burgess Manning silencer, and General Detroit fire extinguishers. The new dragger is finished with International paint and uses Shell lubricating oils.



Profile and deck plan of 38 ft. "Hawk" designed and built by Gladding-Hearn Shipbuilding Corp., Somerset, Mass.

Florida Mullet Canning Helping to Stabilize Prices for Fishermen

Tucker company is first commercial enterprise to can mullet successfully

A more stable market for the mullet catches of Florida's West Coast fishermen has been provided as the result of a new mullet canning plant opened last season at Fruitville, near Sarasota. Owned by the veteran Tucker fishing family, the firm is the first commercial enterprise to successfully can mullet.

J. H. Tucker, Jr., operator of the plant, which is known as the Tellum Canning Co., is now in the process of reorganizing to allow for great expansion into the field of freezing, as well as canning. His plans call for processing approximately 100 cases of canned mullet an hour, and he hopes to use between six and eight million pounds of mullet a year in his plant.

First cases of canned mullet under the Gulf Chicken Label reached Florida markets last July, and since that time, according to Mr. Tucker, the mullet has out-sold other canned fish products consistently. Grocery store owners from Palmetto through Englewood reported a good response from customers, who found the mullet could be used in any recipes that called for salmon or tuna fish.

Long confined to fresh fish markets, with only a limited amount sold for smoking, Florida mullet have fluctuated widely in price, and this has plagued commercial fishermen and made netting operations a highly precarious livelihood.

Last year commercial fishermen along Florida's West Coast enjoyed the greatest mullet bonanza to strike the area since World War II. The hordes of fish appeared in overcrowded schools in the waters around Sarasota, and fishermen reported catches of 20,000 pounds daily as they worked on an around-the-clock basis. With nets straining with each draw, opening of the new Tucker mullet canning plant came at an opportune time.

In the past, declining demand has forced fishermen's prices for mullet to low levels, and there have been intermittent strikes by West Coast fishermen in protest against the low prices. But strikes couldn't touch the source of the trouble—the need for better marketing—so Florida's State Board of Conservation has been trying to improve the situation. They have embarked on an ad-



Mullet fishing boats on Florida's West Coast.



J. H. Tucker, Jr., operator of the Tellum Canning Co., Fruitville, Fla., inspecting cases of canned mullet, for which his fishing family developed a formula after many years of research.

vertising project, which includes introducing canned mullet at shows and to housewives via sheets of recipes. The mullet is used much like salmon in croquettes, salads, fish loaves, casseroles and chowders.

Black Mullet Used

Florida has an available supply of around 63 million pounds of mullet annually. The Tuckers, who have been "meddling" with mullet for the past 30 years, figure their cannery has a potential of 1½ million cases during the fishing season. They can only the black mullet, which spawn in the late Fall. The mullet is cold packed by Tucker in 15 oz. cans, which require about 1.6 pounds of fish per can.

The Tuckers are using a formula developed over three decades of preparing and canning mullet for a limited local market. Years of basic research resulted in the decision to open the cannery and provide the broad commercial markets. Currently, Tucker is working with the University of Miami and the American Can Co. on the project.

Because mullet is the only fish that has a gizzard like a chicken, the Tuckers adopted the label name of "Gulf Chicken Brand Mullet." This label is to be changed to include recipes. The Tucker cannery can presently process 3,600 pounds of fish an hour.

Florida canned mullet has been shipped around the country; locally it outranks salmon in sales by 4 to 1. One advantage from Tucker's viewpoint is that mullet bears a mottled effect on its skin which distinctly identifies it as such, and thus no substitution is possible.

The mullet, a firm, white fish of agreeable flavor and texture, now is selling for around 59 cents a can. "It even tastes good eaten straight from the can," declared one homemaker who tried the fish for the first time. This is due to natural oils of the mullet.

For some time, Tucker's company has been test-marketing frozen mullet fillets, breaded and ready to cook, as well as white mullet roe, relished by fish gourmets. Future operations will include a special mullet chowder developed by Mr. Tucker. Another specialty—smoked mullet—may be undergoing some testing by the Tucker company, too. In addition, an institutional 4-pound pack is envisioned, as well as a market for the by-products of processing the fish.

Fish Trucked from Distant Ports

Distant fishermen send their catches to the Tucker cannery via truck, and wholesalers like Frank Fritch of the Island Fish Co. at Pine Island in Lee County, say: "I feel that Mr. Tucker with his canned mullet has the solution that will rescue our mullet industry." Fritch is a big operator at Matlacha Station in Fort Myers.

(Continued on page 41)

Maine Lobstermen Show Interest in Co-operatives

Lobstermen met in Martinsville last month with the intention of re-activating the Port Clyde Cooperative. The younger fishermen of the St. George region want to put the co-op, formed in 1945 and inactive in recent years, back in business.

Such movements are underway in several spots along the coast as the fishermen investigate the possibilities of marketing their own lobsters. Leslie Dyer, Maine Lobstermen's Assoc. head, said that a series of such groups in the near future is very possible. Dyer has constantly advocated the co-ops as the only solution for the lobstermen in Maine.

He feels that once they are in business, a lobster institute is possible, through which nation-wide marketing could be carried. Also, advertising through a self-leveled tax per pound on lobsters caught, and a purchasing agency would be of advantage to members.

Hearings on Lobster Price Fixing

As a result of the lobstermen's strike the FBI late last month admitted that it is participating in an investigation of the price dispute. Agents are assisting New York Antitrust Division lawyers to determine whether there has been any price fixing or restraint of trade.

Grand Jury hearings were also being held last month in the Federal Building in Portland, and seven witnesses appeared under subpoena. Leslie Dyer, Vinalhaven, association president reported that he is hopeful the FBI men will make a complete investigation to learn who actually is doing the price fixing.

Rockland Firm to Operate All Winter

Arthur M. Thurston, general manager of 40-Fathom Fisheries interests in Rockland announced that the entire fleet of six 145 ft. steel trawlers will fish throughout the winter months. They will go out for redfish, but will take groundfish when redfish cannot be located.

Every effort is being made to expand operations in the shipyard and to recover the once extensive business in ship repair, ship building and machine, electrical and electronic job work.

The smaller marine railway at the shipyard is undergoing repairs to the extent of a \$10,000 job to fit it for the handling of yachts and trawlers.

Protest Canadian Herring Imports

The Coastal Seiners and Weirmen's Assoc. have protested to the U. S. Customs officials that herring brought to Washington County sardine packing plants by Canadian boats are not fresh fish under the terms of the Customs laws, and are subject to payment of import duties. Fresh fish are imported to the U. S. from Canada free of Customs duties.

The Association contends that Canadian imports of herring in a heavy herring run year, as is now being experienced, can lower the income of Maine seiners and weirmen.

Last month the Association held a meeting in South-west Harbor, attended by more than 100 members, and voted not to sell their catches for less than \$20 a hog-head.

Seiners and weirmen recently had been offered \$12 to \$15 a hoghead, depending on the size of the herring.

Sardine Stage Disappearance

Maine sardine cannery reported late last month that herring had disappeared off the coast. Boats sent to Canadian waters could not find them there either. The pack in two weeks ending August 9 was 196,670 cases, 42% less than the same period in 1956 when tremendous catches of fish occurred.



Lobsterman Roy Sargent of Winter Harbor, Maine, in his boat "Damfino". She is 18'6" long, has beam of 6'2", and is powered with a 16 hp. Gray engine.

Fisheries Featured at Exposition

Lobster town, U.S.A. and Maine sardines will be featured at the Eastern States Exposition in Springfield, Mass. on September 14-22, as part of an exhibit sponsored by the Dept. of Sea & Shore Fisheries and the sardine industry.

The sardine industry will display its wares by attracting attention to sardines in mustard sauce. A huge open sardine can filled with a replica of the tasty fish packed in mustard sauce will be placed in the background while cans bearing Maine brands of corporations canning this particular pack dominate the border of the exhibit.

May Landings Double Last Year's

Landings of commercially-caught fish and shellfish at Maine ports during May amounted to 25.6 million pounds valued at 1.2 million. This was more than twice the volume landed during the same month last year. The value showed an increase of \$238,000 or 25 percent. Herring with an increase of 9.7 million pounds was largely responsible for the increased May landings. Alewives and ocean perch showed increases of 1.6 and 1.3 million pounds respectively.

Three Fisheries Loans Approved

Three Maine applications for fisheries loans totaling \$161,450 have been approved by the Department of Interior. George I. Lewis, of Portland will receive \$155,000 to make repairs to the trawlers *Minnie* and *Courier*. He is president of the Trawler *Minnie*, Inc. and of the Russell Inc., which owns the *Courier*. Loans of \$90,000 and \$65,000 were approved to the two corporations.

Lewis plans to have repairs made to the *Minnie* 114' steel formerly the *Batavia*, and the 97' wooden *Courier* at Story Marine Railway, South Portland.

Raymond F. Stoddard, also of Portland, will get a \$6,450 loan to pay for lobster traps and to refinance his boat.

New Booklet on Maine's Commercial Fisheries

A new publication titled "The Commercial Fisheries of Maine" is now off the press, and is available from the Department of Sea and Shore Fisheries, State House, Augusta, Maine. Various aspects of the fishing industry and of the Maine coastal scene are shown in the 38 reproductions of photographs, and there are over 40 pages of text.

The book covers current conditions in all of the State's varied commercial fisheries, describes methods of catching and processing different species, and gives considerable historical background on the industry. It was written and edited by George H. Taylor of the Department of Development of Industry and Commerce staff, who is serving as director of promotion and publicity for Sea and Shore Fisheries.

Great Lakes Anticipate Better Catches

While yields of fish in the Great Lakes region were generally light during August, commercial fishermen expect to produce some good commercial catches this month when lake trout in Lake Superior move in toward shore for spawning.

On Green Bay last month herring were reportedly coming into the bay in small schools as if harbingers of the heavy run which usually occurs in November. On Lake Michigan, commercial fishing fleets were generally producing chub and yellow perch in fair quantities, while herring yields and those of smelt were relatively light. Fishermen operating out of Muskegon and nearby areas were for the most part reportedly getting chub and perch.

Herring yields were fairly light from Lake Huron during the summer, but Bay fishermen hope to see a good herring run this fall on Saginaw Bay.

On Lake Erie, fishing fleets were getting good catches of yellow perch in many instances and fair takes of yellow pike. The best yields of blue pike were made in the eastern waters of the lake, as well as in the mid-lake area.

Named to Great Lakes Fisheries Commission

Donald L. McKernan, Director, Bureau of Commercial Fisheries in the U. S. Department of Interior, has been appointed a member of the Great Lakes Fishery Commission by President Eisenhower. This appointment fills the vacancy recently created by the resignation of John L. Farley.

Mr. McKernan joins Lester P. Voight and Claude Ver Duin, the other U. S. Commissioners on the Great Lakes Fishery Commission.

Michigan Fishermen Drive for Cooperative

Fishermen operating on the east coast of Lake Michigan have started a drive to improve processing and marketing conditions, with the purpose of establishing a Western Michigan fisheries cooperative.

With a series of four meetings at Saugatuck, a campaign was established whereby surveys and conferences will be held to determine specific problems and how they can be met. Surveys are to cover the supply of fish, methods of combating lamprey eels and shad and marketing through a cooperative.

The final goal is to establish a processing plant and quality control, maintenance of normal prices and freezing and storage plants at key points.

Lamprey Traps Get Results

The Wisconsin Conservation Department reported on August 13 that newly installed lamprey traps in streams emptying into Lake Superior had by the end of June caught more lamprey than the traps set in Lake Michigan streams, an indication that the lake trout fishing in Lake Superior may be nearing its end. A total of 22,360 lamprey were taken from the Lake Superior streams, with half of that number coming from the Amnicon River.

The Department reported that there are now lamprey traps on all streams known to have lamprey runs, but said that it would take about six years before the results of lamprey trapping become evident.

Trying to Halt Spread of Alewife

The Conservation Department of the state of Wisconsin is attempting to control the spread of the alewife which is threatening the fishing industry of the Great Lakes. Several years ago commercial fishermen reported alewife in Lake Michigan, and it appeared in Lake Superior in 1955. The increase in population has been more rapid in Lake Michigan, and now has become a problem to the gill net fishermen.



The 52' steel gill-netter "Sonny S.", owned by Charles H. Schneider of Middle Bass, Ohio. She is powered with 160 hp. Gray Diesel which swings 32 x 28 Michigan propeller through 2:1 Twin Disc reduction gear, and is equipped with Exide batteries, Columbian rope, Danforth anchor, Wilfrid White compass, Crossley net lifter and Linen Thread Co. Gold Medal nets.

Pound net fishermen have set nets primarily for the taking of alewives and the largest catch reported was 12,000 pounds in one lift. The alewife has a very low rating for human consumption so consequently the entire production is sold for animal food, making it economically impractical to fish with anything but trapping nets.

The alewife, under normal conditions, spawns in fresh water, but spends the rest of its life in the ocean. It entered the Great Lakes through the Welland Canal as did the sea lamprey, and became land locked. It has adapted itself to continuous life in fresh water spreading through all four of the upper Great Lakes.

The problem does not end with the Great Lakes. The Wisconsin Conservation Department is doing everything possible to keep the alewife from entering inland lakes and streams. Regulations are being made to prohibit the use of transportation of these fish by sport fishermen and minnow dealers.

Fishery Vessel Completes Cruise

The cruise of the Fish & Wildlife Service vessel Cisko on Lake Erie in July has uncovered some interesting information.

The report says trawl hauls were made off Erie, Dunkirk, Long Point, Ashtabula, Fairport and Cleveland. Smelt continued to dominate practically all catches. Larger smelt have become better represented in the catches since the earlier cruise in eastern areas of the lake, except in the very deepest water where they remain rather scarce.

Most of the large smelt appear to stay near bottom, at least during the daytime, while yearlings tend to concentrate in the area of the thermocline, where there is one.

Whitefish were taken in the trawls for the first time this year. Twenty-nine were caught off Long Point and seemed to be most abundant at about seven fathoms.

Trout Decline Blamed on Overfishing

According to Dr. Lynn H. Halverson of the Northern Michigan College of Education, overfishing is the leading cause for the decline of lake trout and whitefish catches in Lake Superior. He takes a skeptical view of the claim by some authorities that the sea lamprey poses a major threat to the lake trout population in Lake Superior.

Halverson stated that large lake trout spawners have definitely decreased in numbers, and the migration of fishermen and gear from other lakes has increased the pressure. The efficiency of the fishermen has been increased by the application of power to operate boats and net lifters, the installation of the depth sounder to survey the bottom, the introduction of special nets and the use of nylon twine gill netting.

Massachusetts Gets First Scallops Frozen at Sea

The first scallops to be frozen at sea were brought in on August 21. It was a 500 pound catch landed by the Fish and Wildlife Service research vessel *Delaware*, being used in a freezing-at-sea study.

After being dredged by the *Delaware*, the opened scallops were dipped in a solution of sugar and salt before freezing, according to the Fish and Wildlife Service.

The catch was transported to Mullins Freezer, Fairhaven, where further studies were to be made from time to time on the flavor and texture of the scallops to see if they can compare with fresh scallops and those frozen on land.

Research on freezing of scallops in the shell is also being undertaken. A total of 50 pounds of the catch remained frozen in the shell during the 16-day trip in the Georges Bank area.

It is expected that freezing of scallops at sea will improve the quality of the catch and make it possible to increase the range of the scallopers.

Research Vessel Measures Scallops

More than 75,000 scallops were measured during a recent cruise of the Fish & Wildlife Service vessel *Whaling City*. The vessel conducted the investigation of scallop size off Georges Bank to develop gear selection curves for scallop dredges with various sizes of rings.

Boston Gets First Tuna Catches

Two vessels arrived in Boston last month with catches of tuna. The *St. Marco* on August 8 reported with 5 tuna and on the 28th the *Rosie* landed 23.

Rosen to Attend Fishing Gear Congress

Larry Rosen, vice-president of the Usen Trawling Co. and superintendent of the firm's fishing fleet, will attend the International Fishing Gear Congress at Hamburg, Germany, from October 7-12. The Congress will be the first of its kind and is to be held under the sponsorship of the Food and Agriculture Organization of the United Nations. Mr. Rosen is the first delegate named from the fishing industry of the United States.

GLOUCESTER Discusses Fisheries Education

Gloucester school and city officials met last month with the Massachusetts Dept. of Education authorities at Boston to discuss the matter of bringing a fisheries education program to Gloucester.

The tentative curriculum as outlined includes courses in ship maintenance, Diesel engines, electronics, ship safety and preliminary navigation.

The financing of the program in Gloucester would be borne by the Federal, State and city governments, with the Federal government providing 50%, the State 25% and Gloucester 25%.

Big Days at Gloucester Piers

Vessels landing at Gloucester exceeded one million pounds on ten different days in August. The largest catch was 2,245,000 lbs. from 24 vessels on the 5th, followed by 2,200,000 lbs. from 33 vessels on the 26th.

Find Haddock Close to Shore

During a summer that has been called "disastrous" for the pogie fleet and "fair" for the whiting and perch fleets, haddock unexpectedly appeared close to shore. In August five boats returned with haddock and haddock scrod totaling 37,000 pounds. The fish had been caught 100 yards to two miles outside the breakwater.



The "Aerolite", 51' fishing dragger owned by Joaquin Martin of Provincetown, Mass., and powered with a D13000 Caterpillar Diesel.

Bundy Heads Fillet Council

The North Atlantic Fillet Council at its meeting held in Boston on July 31 elected F. M. Bundy of Gloucester as president. Other officers elected were: C. J. Morrow, vice-president; James S. Carlson, treasurer; and Oluf Holm, secretary. Thomas D. Rice of Boston and Robert F. Johnson of Halifax, Nova Scotia were appointed associate secretaries.

The Council has as its ultimate objective a broad and sustained advertising program to promote greater use of fillets in the United States.

Waterfront Hard Hit by Fires

A spectacular pre-dawn fire raced along the East Gloucester waterfront on August 18, destroying several buildings, one residence and two small boats.

Destroyed in the blaze were the buildings of the Gloucester Yacht Yard; two buildings of the East Gloucester Yacht Yard belonging to Burnham & Thomas; and a 26-ft. lobster boat owned by Jack Harris. The Gloucester fishing schooner *Sadie Nunan* collapsed on her starboard side, snapping her spars with a crash as flames licked away.

Later in the month a second fire destroyed a two-story wooden structure at the rear of Main Street, causing



Irving C. "Bud" Henderson of Monomoy Shellfish Co., Chatham, Mass. His 16' skiff, powered with 10 hp. Johnson outboard motor, is used for quahauging and scalloping. In bay scalloping the boat tows two drags, each weighing 60 lbs. light, and up to 400 lbs. when full.

damage estimated at \$200,000. The building was owned by United Fisheries Co.

The heaviest loser in this fire was Lee Harrington, owner of the Ribbon Ice Corp., which was to have opened in September.

Good Yield from Clam Beds

Some 115 bushels of clams have been dug from the Farm Creek flats between Coles Island and Coffin Beach at the mouth of the Essex river since the area was opened to diggers on August 1.

This is the first time that clams have been planted in this area and the project is beginning to pay off. Seeding will soon be done off Wolf Hill and experiments are in progress over the length of the Annisquam River.

NEW BEDFORD Scallop Record Near

Scallop catches landed in New Bedford during the first seven months of this year have amounted to 9,425,260 pounds valued at \$4,779,740, compared to 8,107,740 pounds in the same period of 1956.

The record year in New Bedford was 1953 when more than 16,255,000 pounds were landed, but this year's production thus far indicates that the record peak of 1953 may be exceeded.

Yellowtail Landings High

New Bedford yellowtail landings almost hit the 2 million pound mark during the month of July. Sixty-nine trips netted the haul and most of the fish were caught in southeast Georges Bank. The specie was early in arriving and it was reported that many draggers averaged 12 to 15 bushels of the flounder in one tow.

The July catch totaled 1,986,400 lbs. compared to 838,500 lbs. last year.

Total for all fish for the month of July was 5,919,300 lbs. The trash haul for July amounted to 4,035,000 lbs. Only one boat, the *Philip and Grace* is fishing for whiting.

Cooperative May Buy Eldridge Holdings

Negotiations were under way last month by the newly-established New Bedford Seafood Cooperative Assoc. to purchase the combined L. S. Eldridge & Son, Inc. fish company and the Eldridge Scallop Co. holdings.

The Eldridge holdings include a fillet house for processing fish and scallops, a kitchen for pre-cooking fish and scallops, a kitchen for pre-cooking fish sticks and scallops, packaging equipment, and two freezer systems.

Scallop Dragger Sinks

The 91-foot dragger *Michael F. Densmore* opened up and sank on August 25 approximately 47 miles south southeast of the Texas Tower on Georges Bank. Her crew of 11, including Capt. James Burns, were rescued by the New Bedford dragger *Newfoundland*. The *Densmore* was originally the dory trawler *Leretha* built in Essex in 1929.

Draggers Being Repaired

Capt. Eric Besso's dragger *Eugene and Rose*, which struck an unidentified object in Nantucket Sound has been hauled out at Peirce & Kilburn Shipyard, Fairhaven, for repairs.

The dragger took on 7 feet of water, submerging the engine and almost capsizing and sinking the ship, before she was taken in tow by the Coast Guard.

The *Julia Da Cruz* has recently rejoined the New Bedford fleet after being hauled out at Norlantic Diesel Inc., Fairhaven for new planking in her stern. She was grazed by an unidentified boat on July 13 while fishing at Georges Banks.

The *Solvig J.*, Capt. Jack Jacobsen, and the *Pauline H.*, Capt. Leif Jacobsen, have been hauled at Norlantic to have their bottoms painted with International Paint.

The dragger *Barbara M.*, owned by Capt. Albert Hillier has been repowered with a 200 hp. Lathrop Diesel engine at Norlantic Diesel Inc., Fairhaven.

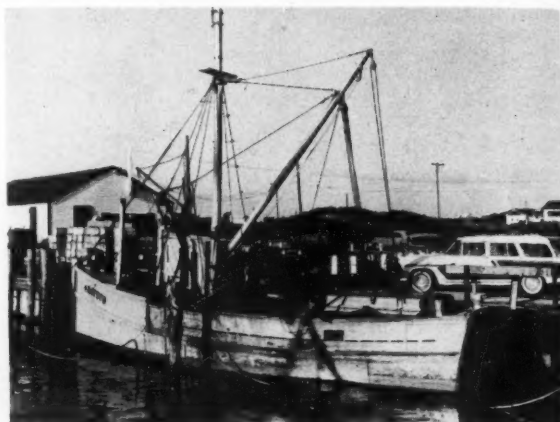
Provincetown Fish Landings Increase

During July landings of industrial fish at Provincetown amounted to 5,249,000 pounds or more than double the landings of a year ago. The principal reason for the increase at Provincetown was due to the types of fish landed. Much of the fish was whiting and herring, caught in quantities by traps.

Extensive Study of Yellowtail

The Fish & Wildlife Service Laboratory at Woods Hole, is conducting an extensive study of the migratory and growth habits of the yellowtail.

About 500 tagged yellowtail fish have been released in three areas, beginning last February. Up until the latter part of August, 10 percent of the tagged fish released off Block Island and Nauset Beach had been recovered. Remaining to be caught are species released recently on the southeastern Georges Bank.



40' dragger "Patsy" at Duryea's Dock, Montauk, N. Y. She is owned by Harry Stannard, has a 135 hp. Gray Diesel and uses Wall rope and Socony oils.

New York Landings Show Gain

Total landings in the Marine District of New York during the first five months of 1957 amounted to 21.4 million pounds. Compared with dockside receipts reported for the corresponding period of 1956, this was an increase of 10 percent. Edible fishery items landed in greatest quantity during the five-month period ending in May were scup or porgy, 6 million; butterfish up 50 percent over 1956; and cod and blackback, which both doubled.

Seek New Inlet at Fire Island

Congressional refusal to provide funds for the dredging of Fire Island Inlet has not caused as much consternation among local fishermen as was expected. Support is building up behind the idea that nature should be permitted to take its course and close the present inlet and that a new one should be built at the site of the original inlet a short distance west of Fire Island Light.

Keeping Fire Island Inlet open to navigation is a never-ending job and it is now believed that a new inlet would be less costly in the long run.

To Display Storm Warnings

Two new weather bureau storm warning display stations have been established on Long Island for the purpose of alerting boating and fishing people as to what velocity wind may be expected. One station has been established in Greenport at the East End Supply Co., dealers in marine supplies, and the other is located at Doug Westin's boat yard on Brown's River in Sayville. Both concerns will operate night and day as a public service in cooperation with the weather bureau office.

North Carolina Scientist Studying Elimination of Oyster Drill

Current studies of oyster drills have shown that the drill is extremely sensitive to light, moving toward light and away from the pull of gravity. The study is being made by Dr. Melbourne Carriker, marine ecologist at the University of North Carolina, who is trying to find how the drill attacks the oyster, how the oyster can be defended, and how conditions can be invoked so that existence for the drill will be impossible.

It has been found that drills also possess a keen sense of smell under water, enabling them to detect the presence of a clam or oyster yards away. The drills prefer young clams and oysters and one growing drill devours from 12 to 14 clams a day.

Fall Mullet Appeal

Cool north winds brought the first sign of mullet along the beach at Carteret late last month, and in two hauls on August 21, 3,300 mullet were taken—700 in one haul and 2,600 in the other.

During the summer the fish are in the inland waters along the coast, then in the fall of the year they move out into the ocean again and on this migration to the sea the picturesque beach hauls are made by crews stationed along the beach.

Protest Shrimp Listing in Market News

The North Carolina Fisheries Association recently protested the listing of North Carolina shrimp in the bulletin compiled by the Fish & Wildlife Service on the New York market. The Association reports that the listing of North Carolina shrimp at \$2 to \$15 below the New York market price began in 1956. It was also pointed out that the count of North Carolina shrimp per pound until recently was listed as "so-called".

The officers of the Association believe that more shrimp graders are in operation proportionate to the catch in North Carolina than in any other shrimp-producing area and hope that such prejudicial and untrue reporting can be corrected.

It has been reported that the Market News Section of the Wildlife Service has begun a thorough check of its reporting system.

Island Seafood Business Growing

Three years ago Ronnie Tillet and Malcolm Daniels established a crabmeat and scallop plant on the southern tip of Roanoke Island in the town of Wanchese.

Today the business is a thriving one and the owners are now constructing a "cooler", a place in which they can keep from two to three days supply of soft crabs before they are processed in their plant.

At present there are 25 to 30 pickers in the Chief Wanchese Packing Co. These pickers process about 3,500 pounds of crab meat weekly.

The owners have no marketing problems. Their entire output of claw and lump crabmeat is taken by a big chain store in Norfolk, Va., but most of the choice lump meat goes to New York City where it is served in the big name hotels and restaurants.

Three Inlets to be Surveyed

The Public Works Appropriation bill recently signed by the President has in it \$30,500 for the surveys of three of North Carolina's inlets—Ocracoke, Bogue and Drum.

Once the surveys are completed, it is hoped money will then be appropriated to get the inlets in proper condition, so that trawlers of the fishing fleet will then be able to move through the inlets in safety with catches that will bring much more money to the coast of North Carolina.



The "Hamp-Lea", new 58' trawler constructed by Morehead City (N. C.) Shipbuilding Corp. for Albert Lea. Her hailing port is Hampstead, N. C., and she is skippered by Capt. Arthur Lewis of Harkers Island, N. C. Equipment includes General Motors 6-71 Diesel, Federal propeller, 3.75:1 Twin Disc reduction gear, Onan auxiliary generator, Surrette batteries, Hathaway hoist, Wickwire wire rope, Real Host range, Danforth anchor, Wall rope, and Ritchie compass.

Alabama Landings Increase

The Alabama coastal production of fishery products by commercial fishermen during June amounted to 1.6 million pounds—an increase of 14 percent compared with June of last year.

Blue crabs were largely responsible for the increased June landings. Mullet showed a gain of 32,000 pounds, while receipts of shrimp dropped 48,000 pounds.

Shrimp Season Open

Day shrimping opening on August 12 in Alabama waters, and August 5 in the Mississippi Sound. Closed to day shrimping in Alabama is an area north of a line between Arlington Docks westwardly to Daphne and those areas permanently banned for protection of oyster beds.

Day shrimping will open a week earlier in Mississippi as the white shrimp are of legal size and should be harvested while available for inland fisheries.

Bayou la Batre Fleet Blessed

At Bayou la Batre, the eighth annual blessing of the shrimp and fishing fleet was held on August 4. Father Theodore Hay and his altar boys made the rounds of the more than 80 fishing boats to ask divine guidance for the craft and crewmen during the coming year.



W. E. Seaman's 42' shrimp trawler "Wilhelmenia" of Bayou LaBatre, Ala. She is powered by a General Motors Diesel, and is skippered by Capt. H. A. Seaman.



34' x 13' x 5' fishing boat "Stardust" owned by Capt. A. E. Olson, Jr. of Pascagoula, Miss. She has 51 hp. Allis-Chalmers engine, Michigan propeller, Exide batteries, and Wickwire wire rope. The vessel's topsides were finished with International paint.

Mississippi Tuna Catch Sets Record

An 81-ton catch of tuna was brought in to Pascagoula during the first week of August, constituting a local record. Twenty-nine tons were aboard the *Sirocco*, with the *Alfhild* landing 27 tons; the *Milmar* 13 tons and the Fish & Wildlife Service boat *Oregon*, 12 tons. The tuna was to be canned at the Bluff Creek Canning Co. in Van Cleave and was expected to produce about 4000 cases.

The tuna, averaging 106 pounds, were caught by long line method in the Gulf of Campeche, off Mexico. Cecil W. Drake, head of the Bluff Creek Canning Co. said that a 50 percent increase could be made by using more line, improvement in technique and better refrigeration.

By the end of the year Drake hopes to double the local tuna fleet and to add one West Coast clipper to try hook and line fishing.

Tuna, Shellfish Stocks Investigated

The exploratory vessel *Silver Bay* returned to Pascagoula on July 29, completing a 17-day exploratory fishing trip in the eastern Gulf of Mexico. The objective of the cruise was to determine the shellfish potential for the area and to scout and sample stocks of sardine-like fish.

The best catches of shellfish were made in an area south of Cape San Blas. Up to six bushels of Gulf scallops were taken in thirty-minute tows in 19-20 fathoms. Yield was approximately 2 quarts of meat per bushel.

The *Oregon* returned to Pascagoula on July 29, completing two months of exploration for surface tuna in the Gulf of Mexico. During the month of June, 117 schools were observed in the northern Gulf. Five schools of white skipjack were observed on the northern edge of the Campeche Banks, but bad weather made it impossible to work them.

New Fish & Wildlife Building Opened

The new Fish & Wildlife building, built at a cost of \$170,000 has been completed. Harvey R. Bullis, Jr., chief of Gulf fisheries exploration and fishing gear research, is the official in charge. Also working at the new laboratory is Edward M. Smith, Fishery Marketing Specialist.

Mr. Smith's office was formerly in New Orleans and transfer was made to Pascagoula in an effort to better serve the Gulf Coast fishing industry, to understand their problems in marketing, and to be more centrally located.

This section of the Service has proposed a joint industry and government motion picture on the Gulf Coast oyster. This production would be utilized throughout the United States by over 150 film libraries who in turn loan the films to civic clubs, schools and universities and interested groups.

Virginia Investigation Shows Hybrid Clams Grow Faster

The first experiments of a special investigation indicate that hybrid clams may be raised to market size at least a year earlier than wild stock.

In November 1954 Dr. J. D. Andrews, Dexter Haven and Curtis Leigh placed 400 marked clams in sand-filled boxes and hung them from the end of their Laboratory pier. Each clam bears a red number on its shell which enables the scientists to tell where its parents originated, when it was planted, and how much growth it has made. This investigation has proved that the hybrids produced by crossing northern and southern parents were growing faster than those having both parents from northern waters. The clams are now in their third year and the hybrids are approximately two inches long, while the northern clams only slightly exceed an inch and a half.

Scientists believe the day may come when it will be profitable for clam producers to raise their own special hybrids in large holding tanks until they can survive heavy predation by crabs and fish.

Fishermen Catch Mostly Croakers

In late July and through August about 50 percent of the reported fish landed in Hampton Roads were croakers. Spot, sea trout and butterfish ranked second in numbers caught and trawlers in the area landed small numbers of fluke, grayfish and king whiting.

The Eastern Shore had more black bonita than any other Virginia area, the catch ranging from 300 to 1200 pounds daily. Croakers in this area ranged from 3500 to 8000 pounds daily.

Enoch and Rufus Hudgins did well, sometimes catching between 200 and 300 boxes of croakers per day, with the price in mid-August going to 16 cents a pound. Capt. Lemuel Hutson and son caught more than 100 boxes per day for a while in July, and Walter Garrett of the Chesapeake Seafoods said that he had had a fair croaker season.

Oysters shucked daily in the Hampton Roads area averaged 300 gallons daily. The production of crabmeat amounted to 10,000 to 17,000 pounds.

The fish catch in the Hampton Roads area during August totaled 1,660,500 pounds or 5,200 pounds more than in the previous month and 193,900 pounds more than in August, 1956. A total of 158,800 pounds was caught in pound nets, and boats brought in 72,500 pounds.

Seek Clam Beds off Chincoteague

Looking forward to the time when clams may become exhausted in present clamming areas, a New Jersey canner recently dispatched two dredge boats to explore grounds south of Ocean City, off Chincoteague. If workable beds are discovered within convenient landing distance of Chincoteague, a new product will be added to this abundant seafood port.

Hot Weather May Affect Oysters

This year's oyster harvest in Virginia waters may be reduced by the summer's unusually high temperatures, according to Dr. J. D. Andrews of the Fisheries Laboratory. Dr. Andrews reports that developing oysters are suffering higher than normal mortalities, and if the hot weather continues into the fall, the mortality rate could go even higher.

Another danger to oysters is a decrease in food supply—tiny microscopic plants in the water which depend on nutrients washing from the land, for their survival. Lack of rain reduces the supply of nutrients.

Fish Stay in Virginia Waters

Returns of tags from croakers, spot and flounders have shown that these fish are remaining in Virginia waters,

and few have moved any great distance. Tony Pacheco of the Fisheries Laboratory with his crew of biologists, have tagged 1,656 croakers since April.

Frank Wojcik, one of the biologists, often keeps his catch alive so that they may be tagged and released. Recently he caught and released a croaker that had been tagged, and the one month later, fishing in exactly the same place, Wojcik caught the fish again. During the month this croaker had increased in length $\frac{1}{2}$ inch.

Appointed to Fisheries Commission

Governor Stanley on August 1 appointed Richard B. Kellam of Princess Anne to the Commission of Fisheries. He fills the vacancy created by the resignation of James Hoge Tyler III of Norfolk.

Large Payments on Oyster Drill Bounty

A Chincoteague fisheries commission official reported recently that during the fiscal year just past, he paid out nearly \$5,000 in bounty for oyster drills or screw borers. This amount applied to only a few square miles of one particular district. The state pays oystermen \$2.00 per gallon to pick these tiny snails off the beds by hand.

Louisiana Fleet Blessings Held at Five Ports

The seventh annual Blessing of the Shrimp Fleet was celebrated at Delcambre in August, with thousands of visitors and trawler owners lining the banks of the Delcambre Canal under tents and parasols against the heat of the day.

The highlight of the fete was the parade of decorated boats wending its way up and down the stream with the priest aboard the lead boat the *Catherine Marie*.

Following the *Catherine Marie* was the royal barge the *Mom and Dad*, owned by Charles Heurtevant who this year gained the crown of King Crustacean because of the 30,520 pounds of shrimp he landed. The Queen this year was Brenda Hanks of Kaplan who was accompanied by two lovely maids.

Third boat in the parade was the *Francis Paul*, owned by Baudoin-Landry Fuel Oil and Shrimp Dock of Delcambre.

There were not as many boats on hand as usual, because the shrimp run had begun in the Gulf of Mexico and most of the boats were in the deep water too far from home to come in without a full load. Since two hurricanes had also curtailed their work they felt they must take advantage of every bit of fair weather.

Blessings of the Catholic church were also bestowed on vessels and fishermen of the Lafitte, Violet and Westwego shrimp fleets.

Some 120 boats of the Lafitte shrimp fleet were blessed in a ceremony on Bayou Barataria. All of the craft were gaily decorated and the procession was led by the flagship *Jerry Joe*, Capt. Henry Lombas.

Vessels and fishermen of the Violet shrimp fleet received blessings in ceremonies at Violet Wharf. Some 12 shrimp trawlers were blessed at this service.

At the Westwego ceremony about 30 boats formed a colorful array of gaily decorated craft as they received the blessing of the church.

The traditional Blessing of the Fleet and Shrimp Festival at Morgan City-Berwick was scheduled for Labor Day week-end. A wide variety of waterfront events promised to make it an impressive and colorful affair.

July Landings Show Increase

During July landings of oysters from New Orleans and the lower Mississippi River area amounted to 6,640 barrels as compared with 5,310 barrels landed in July of last year.

Other landings showing an increase were finfish from the same area. In July of this year landings amounted to



Capt. Charles Heurtevant, crowned "King Crustacean" at the Delcambre, Louisiana shrimp fleet blessing. He is owner of the high-line shrimp "Mom & Dad".

27,000 pounds and in July of last year they amounted to 12,000.

Blue crab landings in July of this year amounted to 525,000 pounds, compared with 410,000 in July of 1956.

Crab meat production in the New Orleans area this July totaled 56,500 pounds compared with 39,200 pounds last July. And in the seven-month period January-July the total crab meat production figure was 243,900 pounds compared with 180,900 pounds in the corresponding period of 1956.

Trawler Burns and Sinks

A 42-ft. fishing boat the *Madonna*, operating out of Port Arkansas, exploded, burned and sank in the Gulf of Mexico last month.

The owner and skipper, Capt. John Dupre and two crewmen all from Delcambre, leaped into the Gulf waters 30 miles offshore and were picked up by the shrimp *Sara S.*, Capt. Wildon Callais, Jr., also from Delcambre.

Emergency Marine Information Broadcasts

A second notice has been issued by the Coast Guard relative to emergency marine information in the central and western Gulf, as follows:

"The U. S. Coast Guard and the Bell System Coastal Harbor radio stations in the central and western Gulf area make scheduled and emergency marine information broadcasts. Coast Guard radio stations transmit on the radiotelephone distress and calling frequency 2182 kc., when it is considered that such transmission will serve a useful purpose. As a matter of general information to owners of radiotelephone equipped craft, the Coast Guard radio stations, lifeboat stations and larger vessels maintain a continuous listening watch on 2182 kc., in order to answer calls for assistance."

Emergency information is broadcast by the following stations upon receipt and repeated on the scheduled broadcast as many times as considered appropriate.

Station	Frequency	Time (Central Standard)
New Orleans	2686 kc.	11:50 AM & 11:50 PM
Coast Guard	NMG 428 kc.	11:20 AM & 6:20 PM
New Orleans	WAK 2598 kc.	8:00 AM & 11:00 PM
Bell System		
Galveston	2686 kc.	11:20 AM & 11:20 PM
Coast Guard	NOY 428 kc.	(Emergency only)
Galveston	KQP 2530 kc.	12:30 PM & 7:00 PM
Bell System		

California Plans Test For Fish Feeding Areas

A proposal to sink obsolete Navy ships off the California coast early next year to provide sheltered feeding areas for fish is being studied by the California Fish and Game Commission.

William M. Ripley, assistant chief of the marine resources thinks such areas will help develop fishing for perch, sea bass, rockfish, corvina and other species which require bottom shelter.

In sandy bottom areas where there is no cover there is nothing for kelp or other algae to tie onto. To sink rocks, old car bodies, or ships will allow marine organisms to grow, providing food for larger type organisms, which would attract fish.

Price Cut May Tie up Tuna Fleet

The possibility that San Diego's albacore fleet might tie up as a result of another drastic cut in the price of the fish was voiced last month by M. D. Stewart, manager of the Five Star Fish Cold Storage Cooperative.

All San Diego, Long Beach and San Pedro canneries were paying \$280 a ton for albacore, the lowest price in nearly 20 years.

A spokesman for the Westgate-California cannery said high inventories and the dumping of more than 16,000 tons of Japanese frozen albacore into the American market, were responsible for the price reduction.

On August 20 the canneries on Terminal Island, led by Star-Kist, announced purchase of 7800 tons of skipjack and yellowfin tuna from San Diego boats. The fish had been stored in the boats since late in July, and was purchased at \$230 a ton for yellowfin and \$190 for skipjack, an average of \$40 a ton less than the price earlier in the season.

Sardine Prices Raised

In Monterey, sardines this year will bring \$52.50 a ton for catches containing less than 25 percent mackerel, \$5 over last year's price. A sliding scale was also adopted for mixed catches, running down to \$42.50 a ton for catches with over 46 percent mackerel.

Named as President of Van Camp Company

Gilbert Van Camp, Jr. is the new president of the Van Camp Sea Food Co. and its subsidiary, Chicken of the Sea, Inc., according to an announcement made recently from the company headquarters at Terminal Island.

Assuming Van Camp Jr.'s former duties as executive vice-president is Glenn H. Copeland. Copeland started with the firm in their San Diego plant in 1936. Before the announcement of his new duties, Copeland was vice-president in charge of operations.

Named to Advisory Committee

Two southern California fisheries executives have been appointed to the reconstituted American Fisheries Advisory Committee by Interior Secretary Seaton.

They are Donald P. Loker of the Star Kist Food Co. of San Diego and San Pedro, and Mason Case, manager of the Fishermen's Cooperative at San Pedro.

Purpose of the group is to provide the governmental department with information and advice on problems affecting the nation's commercial fisheries.

Tuna Boats to Operate out of Moss Landing

The vanguard of albacore boats came into Moss Landing last month to prepare for the run expected off the central California coast this month and next. Among those making this port home base were Captains Jim Butler of the *Blue Skies*, Alex Ogren of the *Jay-Cee*, Sig Brevick of the *Pierce*, Bill Yeoman of the *Twenty Grand*, Oscar Vienola of the *Ann-Marie*, Norris and Errol Scri-

ver of the *Jean-Ellen*, Don Coffill of the *Harriet Mae*, Rudy Lovvold of the *King*, Roy Dulaney of the *Penguin*, Bob Mason of the *Selma J.*, Orville Patterson of the *Silver Spray* and Howard Jensen of the *Cape Cross*.

Capt. Louis Jobow and his boat *Bodega Babe* are new members of the local fleet, and another newcomer to the area is Capt. Leroy Herrington of the *Peso II*.

Good fishing which had resulted in many boats loading to capacity off the lower California coast during July, diminished considerably and as is usual this time of year skippers started heading north.

Rough weather hampered the fishermen for a couple of weeks though the bigger boats took it day after day and averaged ½ to 1 ton a day.

Clipper Returns from Southern Base

The tuna clipper *Intrepid* returned to San Diego on July 27 after two years of fishing in the Gulf of Panama and off the South American coast. The vessel has been delivering her catches to the Van Camp cannery at Ponce, Puerto Rico.

Crew members report that two of the world's largest clippers, the *Western Ace* and *Western King* are operating with the local tuna boats *American Beauty*, *Royal Pacific*, *Katie Lou*, *Sea Magic* and *American Queen* for the Ponce cannery. Operating base of the fleet is Panama. Fleet manager is Harold Morgan, Jr. of San Diego.

San Diego Landings

Nearly 7,000 tons of seafood valued at more than \$1,350,000 was landed during July by San Diego's commercial fishing fleet.

The albacore catch totaled 3,890,960 pounds. Yellowfin landings amounted to 4,553,540 pounds; skipjack, 4,933,030 pounds and bluefin, 404,250.

Tagged Tuna Being Released

Dr. Milner B. Schaefer, director of investigations for the Inter-American Tropical Tuna Commission, reported recently that the Commission is releasing marked yellowfin and skipjack tuna in the Eastern Pacific from Southern California to Peru. The fish bear either Type A or B tags. Each tag is numbered and bears the legend "Return Tuna Comm. San Diego."

To stimulate interest in the program, the Commission will pay \$1 for each tag returned, and in addition will conduct a drawing each year and give \$300 to the fisherman who returned the tag number which is drawn.



40' salmon troller "Tenaya", owned by Allen H. Barker of Chico, Calif. She uses Mobil fuel and lubricating oil, and is equipped with 95 hp. Nordberg engine, Danforth anchor and Ritchie compass.

Newly-launched 127' steel tuna clipper "San Juan" of San Diego, Cal. heading out for the Galapagos Islands on her maiden trip. Built by National Steel & Shipbuilding Corp., she will fish for Westgate California Corp., under command of Capt. Dave Ricco, who was formerly master of the "Sun Jason". Her main engine is a 960 hp. Fairbanks-Morse opposed piston Diesel, and she has Worthington refrigeration equipment and Sperry magnetic compass pilot. Quarters are provided for fifteen men and fish capacity is 340 tons.



Oregon Clam Diggers Wasting Small Clams

Robert J. Ayers, shellfish biologist for the Oregon fish commission, has, for the past two months been examining holes that dot the sandy beaches of northern Oregon after unsuspecting clam diggers have departed.

The biologist found that about 20 percent contain clams — many of them with broken shells. Clams are discarded because diggers consider them too small to utilize or because the shells are broken. Wastage of small clams is one of the reasons large clams are not more abundant on the Clatsop beaches.

Under fish commission regulations, razor clam diggers are obliged to keep the first 24 clams dug regardless of size. This restriction has been imposed to cut down the wastage from clams that are broken and discarded.

It has been suggested that in order to cut down the high wastage diggers move to a different area when small clams are encountered.

Tuna Study Completed

Two research vessels and Hugh M. Smith and John R. Manning, together with nine regular fishing vessels recently completed a ten-day cruise off the Oregon coast to shed more light on the mysteries of albacore migrations.

The Pacific Oceanic Fisheries Investigations branch of the Fish & Wildlife Service sponsored the search which extended from central California to Grays Harbor, Wash.

An observer aboard one of the vessels, George C. Miller, Oregon fish commission biologist, reported that the boat he was assigned to, the *Flicker*, owned by Gus Wagner of Newport, captured 102 albacore during the cruise. Miller put tubular "spaghetti" type tags on 100 of the fish and released them to continue on their unknown ways.

Miller noted that albacore were taken by the *Flicker* this year in 56°F. water. The fish are normally thought to be present in slightly warmer "blue" water. Most of the albacore caught by the *Flicker* were taken about 195 miles off the mouth of the Rogue River.

Tuna Fishing Good

Tuna fishing continued good the middle of August and salmon catches improved.

Fishermen reported that tuna were apparently fairly close to shore since a boat from Ilwaco, Wash. was out only a few hours before starting to catch fish. Tuna boats were fishing all the way from Tillamook, Ore., north to Grays Harbor, Wash. The tuna delivered so far has been of excellent quality.

Seek Better Fish Raising Techniques

Better than 650,000 young salmon minus various combinations of fins are being used at two Oregon fish commission hatcheries this summer as part of the continuing search for improved salmon hatchery techniques.

At Ox Bow hatchery, 100,000 fin-clipper fall Chinook salmon fingerlings have been released during each of the past four months. Each group of fish was marked differently so that adult survivors will be distinguishable.

Returns will be compared to see if the length of time the fish were held at the hatchery has a bearing on the numbers that return as adults.

Tests are also being made on a newly-developed diet for young salmon. During the 12 to 14 months the fish are to be held, close records will be kept on the amount and cost of fish food needed to produce each pound of fish for each diet.

Fishing Boat Sinks off Newport

The fishing boat *Star*, Capt. Ed Jarvis, sank off Newport on August 26 but assistance was given by another boat the *Audrey B.* and Jarvis was removed from the sinking craft safely. Lending assistance in the rescue also was Gene Hill in the *Polaris* who radioed directions.

Jarvis bought the boat recently from Cleo Wells who fishes the boat *Helmi*. All boats involved were out on the tuna grounds when the accident took place.



Loading frozen albacore tuna for shipping to cannery at Astoria, Oregon.

Washington Reports Good Salmon and Tuna Catches

Salmon fishing has been reported better than expected in August. Don Cooper of Alaska Packers Assn. reported a good two-day catch, with 30,000 salmon being processed one day.

Pacific American Fisheries reported a high seiner catch, John Glenovich's *Yankee Girl* with 2,500, an estimated value of \$3500.

Jim Doran of Columbia River Packers Assn. told of seiners coming in with loads anywhere from 50 to 2200 salmon per boat.

Fishermen in the Bellingham area were disappointed early in August when an emergency closure to allow fish escapement, cut 24 hours from their fishing time that week.

Good Tuna Catches

Tuna boats from Westport reported exceptional catches early in August. Large schools, running about 12 pounds, were reported about 25 to 30 miles off Willapa Harbor, with boats reporting a daily average of 150 fish.



Capt. Sigurd Henriksen on his 45' salmon purse seiner "Pershing" at Fishermen's Wharf, Seattle, Wash. The vessel fishes Puget Sound and Alaskan waters, carrying a crew of seven. She was built in 1918, and has been owned by Capt. Henriksen since 1944.

Puget Sound Salmon Pack

The amount of sockeye salmon canned on Puget Sound this year was running ahead of last year as the season drew to a close. The pack to August 7 was 82,280 48-lb. cases this year as against 72,620 cases on the same date last year. Pink salmon canning is also running ahead of 1955.

May Develop Clam Beds

Shellfish expert Dr. Victor L. Loosanoff arrived from the Fish & Wildlife Service's station in Milford, Conn. to work with the department and state fisheries director Milo Moore, on the possibility of developing commercial clam beds in the state.

Changes in Salmon Regulations

Minor concessions to the requests of fishermen were made in the final draft of pink and sockeye regulations, covering the season during September and October; released by the International Pacific Salmon Fisheries Commission.

The Commission approved the rules in session at Bellingham on July 26 after hearing objections from its Advisory Board to the regulations as first proposed.

A change in daily opening and closing times was made for the San Juan area, but the Fraser River Council's

scheme for a change in fishing hours every two weeks was rejected as too complicated.

The Commission agreed that any adjustment for equal division of the catch would be accomplished by granting of additional fishing time to whichever national segment of the industry required an increased number of fish.

Salmon Ship Has Record Cargo

The Alaskan Steamship Co. freighter *Tonsina*, Capt. Hans Rynning arrived in Seattle with the most valuable canned salmon cargo in history. The ship was carrying 314,080 cases of canned salmon valued at \$13,687,000.

The welcome was tied in with National Canned Salmon Week which was observed August 23-30.

Seattle Landings

Otter trawl landings at Seattle in August were 895,800 pounds. In August 1956 landings amounted to 1,113,500 pounds. True cod was the leading variety with 287,500 pounds which was an increase from the 216,620 landed in August of last year. In the halibut fishery, 3,023,600 pounds were landed. Landings of rockfish, sablefish and ling cod showed increases.

The August landings were 220,900 pounds more than the landings for the previous month.

Seattle to Have Bureau of Fisheries Office

A new regional office in Seattle for the Bureau of Commercial Fisheries has been assured by Interior Department officials. The new office will have a 10-man supervisory staff composed of experienced commercial fisheries people, with the possibility that some members of the Washington, D. C. staff will be sent to Seattle.

New Type Clam Digger

After three years' work, James Batstone of Shelton, perfected a clam-digging device that reduces the shell breakage. The device has been approved by the State Department of Fisheries and Batstone has made about 2,200 of the diggers in his workshop.

Called the Sandpiper, the digger is made of a tube with a small vent and a handle. It is pushed down over the clam hole about 12 to 18 inches. A finger is placed over the vent and the Sandpiper pulled out slowly. When out, the finger is removed from the vent and the sand and clam dumped on the beach.

Seek Bounties on Predator Fish

A bill to establish bounties on fish which prey on Pacific Northwest salmon was introduced last month by Sen. Warren G. Magnuson. The bounties would be \$10 a ton on dogfish, 10 cents a pound on dogfish-shark livers, \$20 a ton on lamprey eels taken from the Columbia and other Pacific Coast rivers, and \$40 a ton on hair seals and sea lions.

Good Results from Fish Plantings

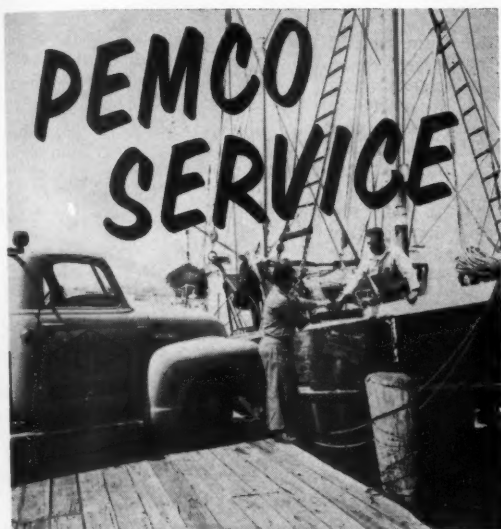
The Washington State Department of Fisheries reports good results from the planting of young salmon. 55 million young salmon will be planted this year and be reared to migratory age so they will have a better chance for survival in streams and the ocean.

In the first six months of this year 32,400,000 fall Chinook fingerlings and 9,450,000 silver salmon fingerlings were released in state waters.

Halibut Catches Lag

The halibut fleet in the Far North have not been meeting with such good luck as the salmon and tuna fleets. By mid-August 21½ million pounds had been landed, almost 1 million pounds below last year. The fleet had expected to have its quota of 30 million pounds by mid-August, but now figures it will be early September.

Of the 158 United States and Canadian boats which have fished in Area Three, only about 60 were still operating in late August.



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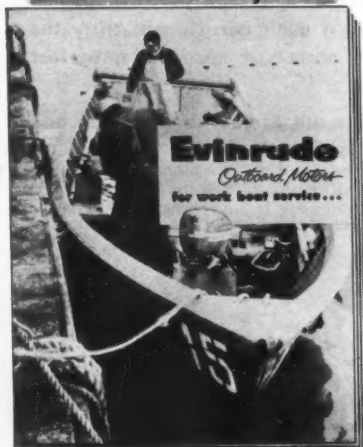
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New Jersey Clams Plentiful Offshore

Fears that the sea clam would become extinct off the Jersey shore last spring by some dredgers were apparently unfounded. Recently it was discovered that there are plenty of clams in the water off Ocean and Monmouth Counties, but they are found farther offshore.

In March and April it was reported that production had fallen off 75 percent and known beds yielded mostly dead or dying clams. Beaches were littered with dead clams, and two dredge fishermen—Capt. Joseph J. Magill of Brielle and Capt. Frank Matthews of Bradley Beach—reported dead clams floating on the surface over vast ocean areas.

Capt. Magill reports that there are no clams within eight miles of the beach, but they are in abundance for the dredging from eight to 20 miles out. The main source is the Manasquan Ridge, about eight miles offshore.

The Point Pleasant Canning Co., which operates a processing and packing plant at Point Pleasant Beach, has been operating six dredgers and has been getting good supplies of clams from eight to 20 miles offshore. The firm also is supplied by four independent boats. When the plant goes into operation this winter, it will buy clams from two more dredgers.

Unusual Catches Reported

Bob Crowley of Green Creek, reported the catch last month of a rare Indian Ocean fish in pound nets in Delaware Bay.

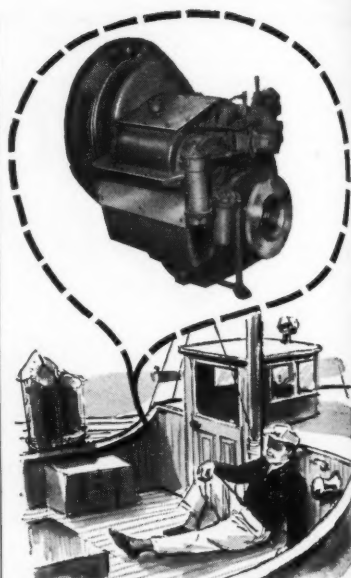
The fish was a 22-inch triple tail which weighed 12½ pounds. The fish was the fourth of that species caught by Crowley in his commercial fishing experience and the 10th he has seen in the past 10 years. Only four have been reported caught on hook and line in the past 40 years.

The other unusual catch last month was made by Capt. Anthony Derocco who operates the fishing boat *Endeavor* out of Barnegat Light. He brought in a small lobster which was colored a vivid sky blue all over. He caught the lobster while trolling about 190 miles off the coast.

Wildwood Suffers Fire

Fire last month destroyed the OK Fishermen's Assoc. docks at Otten's harbor in Wildwood with a loss of \$250,000. The fire levelled two blocks of dock and packing sheds and damaged five boats extensively.

The boats damaged included the *Patsy*, the *Anna S.*, owned by Kenneth and Jesse Shivers; the *Sea Bird*, owned by Carl Hokanson; the *Erma C.*, owned by John Carlson



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and the *Elizabeth*, owned by Thurston Hendrickson.

Nets and other fishing equipment owned by John Carlson, Henry Hendrickson, Iswald Larson, Henry Hanson, Thurston Hendrickson, Finn Henderson and Gus Ellison and valued at \$10,000 was also lost.

May Landings Increase

Landings of fish and shellfish at New Jersey ports during May amounted to 6.2 million pounds valued at \$579,000. Compared with the corresponding month of the previous year, this was an increase of 1.7 million pounds and \$195,000. The catch of surf clams was largely responsible for the increased May landings. Fluke, sea bass and sea trout, also showed increases.

Georgia Shrimp Catch Higher This Year

Shrimp production in Georgia is up this year and with prices much higher than in 1956 the fishermen are prospering.

Figures through June 30 show that Georgia fishermen netted 1,561,000 pounds of shrimp, well over the 900,000 pounds reported at the same time in 1956.

Other seafoods also are being harvested in bigger quantities this year. The half-year production of fish was 386,000 pounds and last year it was 300,000 pounds.

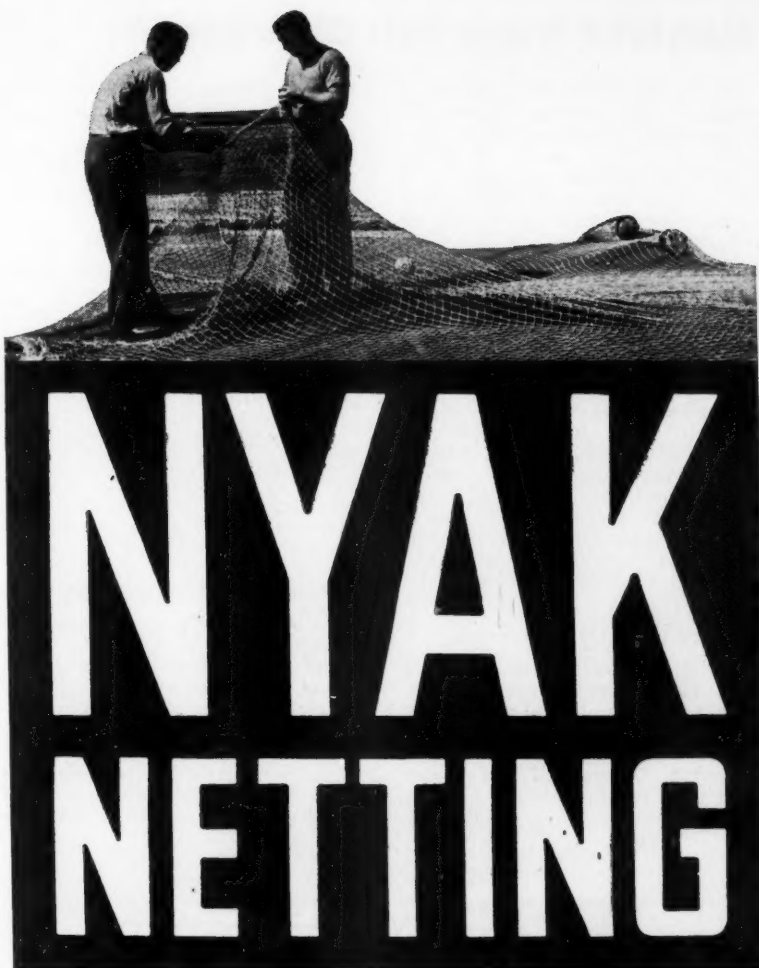
Crab production for the first six months of the year amounted to 4,236,000 pounds. Last year the figure was 4,080,000 pounds.

SeaPak Freezer Enlarged

Now in full operation, the new flash-freezing tunnel of the SeaPak Corporation, St. Simons Island, gives this frozen seafood processor what is claimed to be the greatest shrimp production potential in the United States. The new tunnel alone has a freezing capacity of 3,000 pounds an hour and, when added to SeaPak's other freezing systems, allows the plant to process more than 4,500 pounds of shrimp an hour.

To flash-freeze shrimp at a temperature of minus 50 degrees, the tunnel is refrigerated with a "two-stage" refrigeration system, composed of a 15 by 10 inch Frick ammonia compressor which is used as a booster, and a 9 by 9 inch upright FAC for the second stage. The cooling capacity of the two compressors acting in tandem is 52 tons.

The cold flash-freezes and seals the surface of the shrimp in about three minutes, preventing dehydration and possible weight loss. The SeaPak system drops the temperature down so fast through the critical freezing zone with cold air that ice crystals remain minute, and there is the least possible breakdown of cell structure.



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MAKERS OF FINE NETTING FOR OVER A CENTURY

Maryland Wants Soft Clam Survey

The Seafood Workers Union of Crisfield requested the Department of Research and Education at Solomon's Island to survey Somerset County's clam beds, to determine if the County has enough soft-shell clams in its waters to make for a big industry. Watermen assert that a half million dollars worth of clams could be caught and marketed yearly in Somerset County waters.

At present it is unlawful to catch soft-shell clams with hydraulic dredges in Somerset County, which is the modern method. If a survey determines that soft-shell clams grow in large quantities in the county waters and can be caught in the modern way without damage to the oyster beds and the soft and hard-shell crabs, legislation could be introduced in the Maryland Legislature at its session next February to permit the soft-shell clam to be caught.

Oysters Bring Higher Price

Oyster production took a dip last year, but watermen got a better price for their diminished supply than ever before. Oyster production for the fiscal year ending June 30 showed a drop of 529,700 bushels from the previous year. Oysters brought an average of \$3.75 per

bushel, a 50-cent increase over the all-time high of \$3.25 recorded the preceding year.

The drop was caused by the effects of Hurricane Hazel which hit the Chesapeake Bay area October 1954.

Tonging Season Opens

Maryland's oyster tonging season officially opened September 1, with Somerset's County's season opening the 15th. A few oyster packing houses in the county began operation the first week in September, getting their shell-stock from other areas, outside the county.

Since there haven't been any storms to hurt them, samples of oysters have been showing up good for this time of the year, and more oysters than usual are expected in the gallon-to-the-bushel class.

Challenge Menhaden Laws

Out-of-state commercial fishermen recently appealed to the U. S. Supreme Court from a lower-court ruling upholding Maryland laws restricting menhaden fishermen. Maryland laws that prohibit the use of purse nets by commercial fishermen and exclude non-residents from fishing within three miles of the Maryland coast, are being chal-

lenged. The fishermen contend that the Maryland laws violate the federal constitution by depriving them of liberty and property without due process of law; by imposing an undue burden on commerce, and by depriving them of the privileges and immunities of citizenship.

Crabs Plentiful

Crabs, hard and soft-shells, were still holding the center of the seafood stage this month. After being reported as very scarce the first weeks in April, the other months up to and including August are said to have shown a normal supply. Figures released recently show that Maryland seafood packers are running ahead of last year's season after the first three months of the eight-month season in the processing of hard and soft-shelled crabs.

During April, May and June of this year, a total of 10,978,650 pounds of hard crabs were processed as compared with 10,708,900 pounds in the same period last year.

The three-month total of home-grown and imported soft crabs handled jumped from 343,600 dozen last year to 749,440 dozen at the end of June this year.

Drought Affect Slight

Scientists at the Chesapeake Biological Laboratories at Solomons report that the summer-long drought has not had too much effect as yet on Maryland's oyster crop in Chesapeake Bay.

Dr. Francis Bevan, state biologist, stated that although the salinity of the water in Chesapeake Bay is above normal it still is not as high as at times in the past. The situation is more critical in Delaware Bay and in the Virginia portions of Chesapeake Bay.

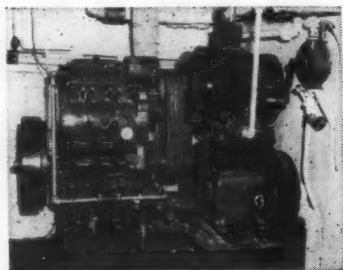
Shark Caught in Haul Seine

Haul seiners operating in the Patuxent River out of Broome Island received a surprise visit recently when a ten-foot shark that tipped the scales at 289 pounds was taken during seining operations. Fishermen operating the seine included Captains Jameson Pitcher, Larry Pitcher, Vincent Elliott and William Barnes.

The fish was tentatively identified as a cub shark which has never been recorded in Chesapeake Bay and its tributaries before.

Crab Packing Laws Approved

The State's controversial new regulations governing the pasteurization of crab meat have been given the formal approval of the attorney general, and were expected to become effective September 3. The new rules provide that if crabmeat is to be pasteurized, the process must be completed within 24 hours after the meat is picked, and it must be plainly labeled as pasteurized.



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"turns an air compressor, 1½ in. bilge pump and 10 KW generator at the same time . . .

just as if it had no load at all!"

Says Capt. Vincent Bono, Skipper and Co-owner of new 93' dragger, Carmen & Vince, Medford, Mass.

"WORKS BEAUTIFULLY, IS VERY CHEAP TO RUN", continues Capt. Bono, "uses about 10 gallons of fuel for 6 hours of operation. We use the Lister to charge the batteries and run the bilge pump while lying-to at sea. Also to keep up the batteries when we run our 5 HP fish hoist to unload the catch."

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recommendations of the yard and of other boatowners in this fleet. (Lister auxiliaries are used on ¾ of New England's fishing fleet!)

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Connecticut Official Wants Equalized License Fees

Capt. Israel M. Jacobs, recently appointed by Gov. Ribicoff as a member of the Atlantic Fisheries Commission, is planning to attend the 16th annual meeting of the Commission in September at New York.

Capt. Jacobs is expected to press for action to equalize license fees between the states of New York, New Jersey, Massachusetts, and Connecticut during the session.

Stonington boat owners are limited as to their fishing area because of the larger fees charged by the other states as compared with those charged by Connecticut to out of state commercial fishermen.

Plant Plans Dormant

There now seems to be little likelihood of a fish processing plant in Stonington despite the fact several months ago it appeared that it would become a reality.

Fishermen here had sought such a plant as a means of providing more adequate landing facilities and a better market for their fish.

Officials of the Southern New England Fishermens Assoc. indicated a mass migration of commercial fishermen from Stonington might take place if a plant was not attracted here, but to date, most of the boats are still bringing their landings into Stonington and do not appear ready to make such a move.

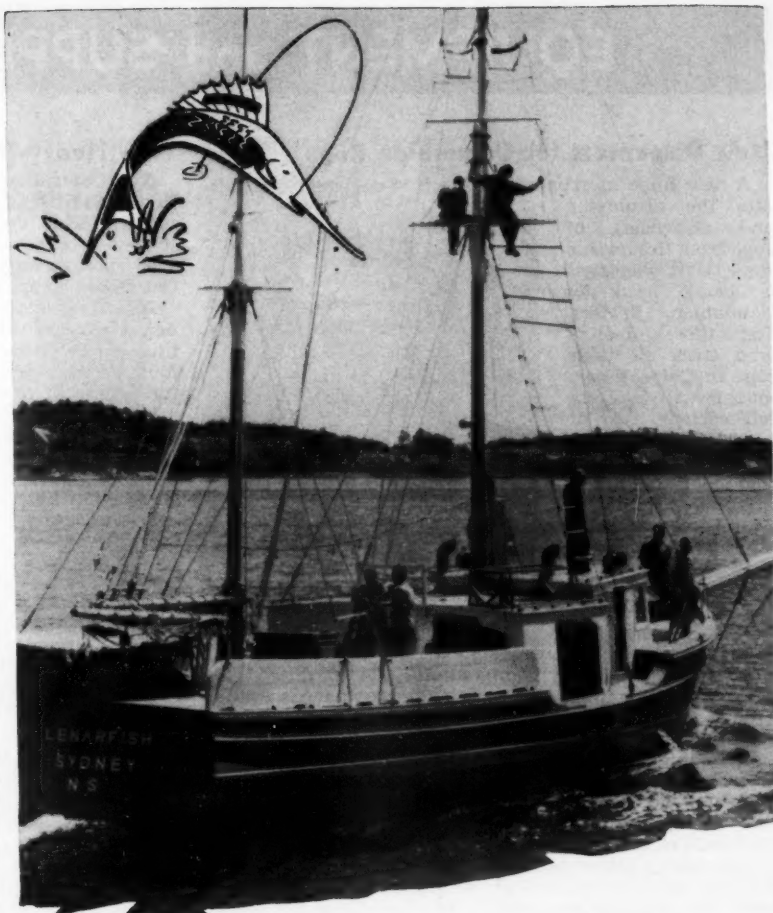
Oyster Setting Underway

Observations on setting of oysters which began at the end of June, indicated that the first set occurred on July 21. Since that time, no new set has been found on the collectors. Examination of the numerous samples brought in by several oyster companies also showed practically a complete lack of set. The only area which appears to have secured some set earlier in the season was Compo Beach.

Setting of starfish began during the first week of July and is continuing. The heaviest setting occurred between July 11-25 with the maximum about July 18. Even at that time, however, setting was not too heavy and on August 7 its intensity had greatly lessened averaging approximately two starfish spat per 40 shells per 3-day period.

Dragger Changes Owners

The Stonington fishing dragger *Little Chief*, one of the top members of the dragger fleet, has changed hands. The new owner, Capt. James Henry who purchased the vessel from Capt. Joseph Maderia, formerly skippered the dragger *New England* for Gino Rendeiro. Capt. Frank Vieira will operate as skipper of the *New England*.



How to fish 6000 hooks on a 7-mile line

Sailing out of North Sidney, Nova Scotia, the *Lenarfish* daily plies the Atlantic in search of cod and swordfish, often fishing 6000 hooks on a 7-mile line. The vessel is one of a fleet operated by Leonard Brothers, Division of National Sea Products.

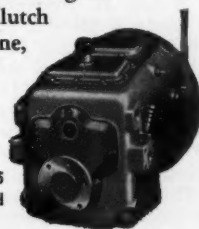
The *Lenarfish* features a 275-hp Cummins NHMS-600 Diesel Engine driving through a Twin Disc 3:1 Marine Reverse and Reduction Gear.

According to Captain Thomas Chislett, the Twin Disc Marine Gear is shifted more than 100 times a day and, he says, "We have had no trouble whatsoever . . . even in towing boats of similar size and larger in heavy seas."

This kind of heavy-duty operation is one of the reasons why every Twin Disc Marine Gear is built for maximum life, minimum service and utmost reliability.

If you're planning a new vessel or repowering in the 40 to 340-hp engine class, make sure you demand the very best in marine gears—specify Twin Disc on the marine engine.

Twin Disc Clutch Company, Racine, Wisconsin.



Twin Disc MG-165
Marine Reverse and
Reduction Gear.



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SEPTEMBER, 1957

SEPTEMBER, 1957 - NATIONAL FISHERMAN

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EQUIPMENT and SUPPLY NEWS

New Dispensers for Columbian Rope

A new Rope Merchandiser which is designed to facilitate the displaying and dispensing of rope from Columbian Rope Unit Packages is being used by Columbian dealers. For those dealers who stock all their rope in Colpack cartons, it will take six full cartons, two of which may be the 100# size. For those who stock their rope on reels, it will take 6 full reels and if desired, two of the small size reels (25#) may be installed in each of the side angle spaces.



New Columbian Rope Merchandiser

This versatile, heavy gauge steel rack will hold either cartons or reels or any combination of both. From the position of each unit on the rack, the rope feeds easily through the guides to the simple, accurate measuring device, and may then be cut to any desired length.

Also being used by Columbian rope dealers is a self-service rope merchandiser designed for selling Columbian's new 50 ft. and 100 ft. manila rope coils. The top shelf may be used to display other Columbian ropes in small coils or cartons.

Columbian's self-service coils are displayed with eye-catching visibility in the Pick-Me-Up Merchandiser. All metal and mounted on casters, its dimensions are 22"x 22"x45-1/2", and it takes up less than 4 sq. ft. of floor space.

New American-Marc Electro-Dynamics Div.

Formation of Electro-Dynamics Division of American Marc Inc. has been announced by W. Denis Kendall, president of the firm. The new Division will specialize in the development and production of permanent magnet generators rated at 500 watts to 10 kw., for use with American Marc Diesel engines, and also will produce generators for other engine builders.

Wilson H. Bucknell, until recently chief engineer of O'Keefe & Merritt Co., Los Angeles, will head the new Electro-Dynamics Division. While with O'Keefe & Merritt, Mr. Bucknell was responsible for development and production of the 15 kw. permanent magnet generator used by the U. S. Marine Corps. He also developed for the Air Force the first Diesel generating plant capable of full remote control under "winterized" conditions, using permanent magnet generators.

The permanent magnet-type generator of the sizes to be built by the Electro-Dynamics Division is a relatively new development in the electric generation field. Among its advantages are the elimination of brushes or slip rings within the generator, the total elimination of explosion dangers resulting from sparks and arcing of brushes, greater voltage stability, and ability to recover from short-circuits without damage to the generator.

American Marc permanent magnet generators are of the alternating current type, but also will be offered for direct current service with an integral rectifier of a new type that converts the AC current to DC, with an operating efficiency of over 98%. The AC models will be offered in all standard frequencies between 60 and 400 cycles.

New Heavy-Duty Caterpillar Marine Diesel

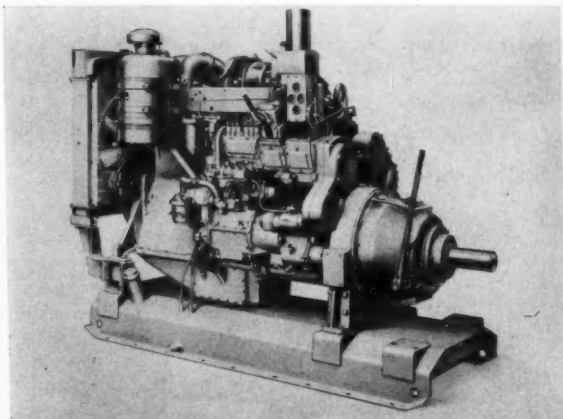
The Caterpillar D353 engine is now available for the first time for marine propulsion and electric set arrangements. This 6-cylinder, four-cycle heavy-duty Diesel has a 6 1/4 in. bore and 8 in. stroke, and is rated 390 hp. at 1300 rpm. (maximum output). The rated output of the Cat D353 electric set is 200 kw.

Important among the features incorporated into the new engine is the Caterpillar fuel system, whose versatility allows operation on a wide variety of fuels without fouling. It is designed to function equally well on No. 2 furnace oil or premium quality Diesels fuels.

In addition, the camshaft on the D353 engine is mounted high in the block, permitting the use of a short, rigid valve train, which produces accurate valve motion. Hardened steel valve seat inserts and positive valve rotators contribute to long, efficient valve seat life.

The turbocharging feature of the D353 utilizes waste energy from engine exhaust to pack more air into the cylinders. This results in more complete combustion of fuel, and increased engine horsepower. Since the turbocharger does not produce a parasitic power load on the engine, but uses energy which would otherwise be lost, the over-all efficiency and economy of the engine is increased.

Concurrent with the availability of the Cat D353, the company is also making available a full line of matched attachments. Such items as air, electric or gasoline starting systems; clutches; bases, controls and governors; cooling systems and mufflers have been specifically designed to match the new engine's performance in all applications.



Caterpillar D353 Diesel, which is rated 390 hp. maximum at 1300 rpm.

Kaar Announces New Broadcast Tuner

Kaar Engineering Corp. of 2995 Middlefield Road, Palo Alto, Calif., has just introduced its new Model R 909 B.C. Tuner, the "Neptuner", which is designed for boats with radiotelephone equipment but no facilities for broadcast reception. The new Tuner will work with the Kaar TR 242 and TR 222 or any marine radiotelephone unit, providing broadcast entertainment and background music for the boat owner, while still maintaining monitor service on the marine frequencies.

Three tubes are used in the Neptuner, which is finished in an attractive brown and beige case, 2-3/4" high by 10-5/8" wide x 5-3/4" deep. It can be mounted in any convenient position, adjacent to or remote from the radiotelephone. It uses the radiotelephone loud speaker and amplifier. Connections are made through a simple plug-in arrangement. A separate antenna is used.

"Here comes the fleet now, Cyrano. My, they sure get back in a hurry since they've been using Roebbling Special Galvanized Rope."



Anybody that hangs around a fishing fleet knows that Roebbling fishing boat rope does a tough job longer. It's easy to handle and specially galvanized to stand up under hard work and around-the-clock corrosive attack.

Take a tip from a couple of wise birds who know a well-run fleet off when they feed off one. Roebbling SPECIAL GALVANIZED is tough...for shrimp rope, trawling rope and purse seine rope. Call your distributor or the nearest Roebbling office. John A. Roebbling's Sons Corporation, Trenton 2, New Jersey.

(Buy from the guy who eats your fish)

ROEBBLING

Subsidiary of The Colorado Fuel and Iron Corporation



Perkins Machinery in New Quarters

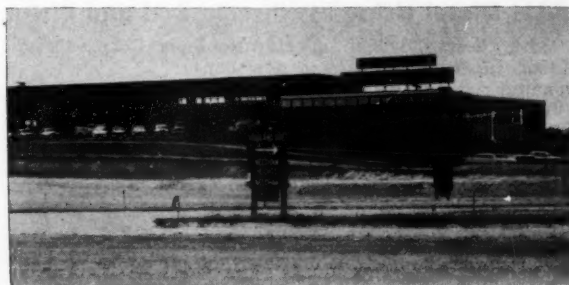
The new building of the Perkins Machinery Co., Inc. in Needham, Mass., was officially "opened" recently, with the Perkins organization playing host to customers and friends numbering close to 1600. With "opening" of the new quarters, John B. Perkins, president and treasurer, announced a change in the corporate name from the Perkins-Milton Co., Inc. to the Perkins Machinery Co., Inc. The business is confined generally to sales and service of Caterpillar Diesel engines and allied equipment.

Located on 5 1/3 acres, the new quarters contain 55,000 square feet under cover, and have exactly twice the space that was used in the former South Boston headquarters on Dorchester Avenue. The Parts department alone contains 17,000 square feet.

The new building has eleven service bays — seven for customer service, three for used equipment rebuilding and one service bay for engine work alone. It is in this engine bay that any size engine, from the smallest gasoline starting engine to the largest Caterpillar Diesel engine (marine and industrial) is repaired by factory trained personnel. Completely new service machinery and tools have been installed, including overhead cranes, and many other machines to facilitate service.

A Perkins has headed the Company since 1906, when John B. Perkins, father of the current president, formed the Perkins Machinery Co., distributors of industrial machinery. Later, P. I. Perkins, his brother, became associated with the company as a sales representative. After the death of John B. Perkins, in 1918, "P.I." took over active operation of the Company and formed the P. I. Perkins Co. with headquarters in Boston. In 1923 the present John B. Perkins became associated with his uncle as a salesman.

In 1928, P. I. Perkins was appointed distributor by the Caterpillar Tractor Co. in the four central New England States. After P. I. Perkins passed away a new company



New, larger quarters of Perkins Machinery Co., Inc. at Needham, Mass.

was formed in 1944, the Perkins-Eaton Machinery Co.

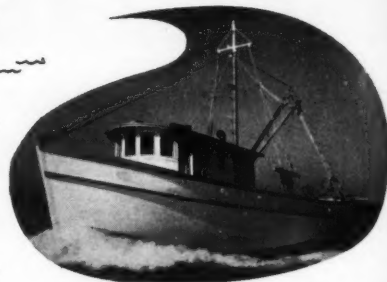
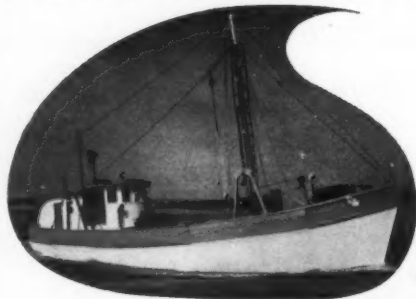
In 1951 Tom Milton, a long-time friend of John Perkins, replaced Thad Eaton as partner, and the new firm of Perkins-Milton Co. conducted the business. The sudden death of Tom Milton in 1956 left John Perkins as sole executive officer. He has adopted the same name, Perkins Machinery Co., Inc., that was used by his father 51 years ago.

New Spray Products Fire Extinguisher

A new fire extinguisher in a handy 12-ounce pressurized can has been announced by Spray Products Corp., Camden, N. J. It is effective against virtually all types of first-stage fires, is non-poisonous and contains no carbon tetrachloride. Now being marketed throughout the entire Spray dealer organization in the United States and Canada, the new fire extinguisher was years in development, according to Miles Powell, vice-president in charge of sales.

Spray Products Corp. is best known for its Spray Starting Fluid, a highly combustible priming fluid that causes gasoline and Diesel fuel to ignite in seconds under conditions of extreme cold or dampness.

From The NORTH ATLANTIC



To The GULF OF MEXICO

MOREHEAD CITY SHIPBUILDING CORP.
Telephone 6-4146 Morehead City, N. C.

Please send me free pictures and information about Hatteras Trawlers of different lengths.

My name _____

Street address _____

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RUGGED, DEPENDABLE *Hatteras Trawlers*

are making money for satisfied owners. Top-grade materials, sea-tested design, the craftsmanship of experienced builders, put these boats in a class by themselves. Whether you fish in Northern or Southern waters, there's a HATTERAS TRAWLER to fit your needs. Mail the coupon today and get full information on these outstanding work boats.

P&H Diesel Using Mushroom Rod and Piston

The Diesel Division of Harnischfeger Corp., Crystal Lake, Ill., is introducing a new connecting rod and piston design for its line of 2-cycle P&H Diesel engines. Termed a "Mushroom" rod and piston by Harnischfeger, the design utilizes a semi or half ball and socket coupling in place of the conventional wrist pin arrangement, and is the first of its type ever used in Diesels. Bearing area is increased up to 2-1/2 times over pin construction, providing smoother operation and longer bearing life.

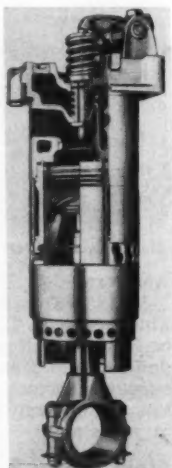
The new hollow "Mushroom" rod carries an oil supply from the crankcase to the network of oil grooves in the top side of the rod bearing. Both oil flow and oil pressure to the bearing is increased.

The piston itself rotates freely in the cylinder, maintaining roundness of both piston and cylinder wall, and keeping ring lands free. Carbon accumulation is reduced, piston and ring life lengthened, and engine oil control improved. Uniform piston contact with the cylinder wall also provides better heat dissipation.

Both rod and piston are part of the P&H power Assembly — a single service unit including a complete head, liner and water jackets — which can be replaced in any P&H Diesel in less than one hour.

Cummins Offers New 450 hp. Turbodiesel

Cummins Engine Co., Inc., Columbus, Indiana, has announced production of a new 450 hp. Turbodiesel engine for marine and other uses. It is the LRT-6, which



"Mushroom" rod and piston used in P&H

broadens the horsepower range of the slow speed, heavy duty L engines offered by Cummins. Previous models in the L series developed 250 and 300 hp.

The LRT-6 develops its 450 hp. at 1100 rpm. and has displacement of 2477 cubic inches. It is a six-cylinder engine equipped with a Cummins T-590 turbo-charger, by means of which normally wasted energy of exhaust gases is utilized to develop additional horsepower. A turbine, located in the exhaust system, drives a centrifugal blower in the air intake system. By forcing a greater weight of air into the cylinders, more fuel can be burned completely and more power developed.

The new Turbodiesel has the Cummins PT (pressure-time) fuel system. The PT principle of fuel metering utilizes a fixed size opening in a simple injector and variable pressure to meter the fuel charge.

Twin Disc Has New Research Laboratory

Completion of a new and modern research laboratory has been announced by Twin Disc Clutch Company's Hydraulic Division, Rockford, Illinois. The new laboratory is housed in a brick building having approximately 12,800 square feet of floor space. Test equipment currently occupies 8580 square feet, with the balance available for future requirements.

The entire facilities are being utilized in the study of fundamental functions of clutches and clutch components, as well as the working fluids used in fluid couplings and hydraulic torque converters. Hydrodynamic tests such as blade stage cascades, hydro tunnels and flow research are held in a laboratory room completely enclosed and isolated from the rest of the facilities.

A new 1000-hp. ac dynamometer has been installed, which will absorb up to 20,000 lb.-ft. of torque at zero rpm. This dynamometer accomplishes three purposes: (1) it delivers higher power to test units than previously possible; (2) it gives previously obtained data in much less time; and (3) it gives data never before possible.

BOAT CATCHES

For Month of August

Hailing fares. Figure after name indicates number of trips.

WOODS HOLE (Mass.)

Angenette (1)	2,000	Madeline (4)	8,300
Arnold (6)	29,500	Margie L. (4)	24,100
Austin W. (1)	4,700	Maria & Julia (1)	6,900
Bernice (3)	13,200	Mildred & Myra (3)	12,200
Bluefin (1)	1,000	Minkette (1)	800
Bridget Ann (1)	1,300	Morning Star (3)	10,100
Clifton (1)	2,100	Natator (2)	10,600
Clara C. (2)	3,200	Peggy (4)	2,200
Curlew (3)	24,600	Phyllis (1)	7,700
Dorothy (1)	1,700	Reliance (6)	21,500
Ebenezer (2)	1,900	Rita (1)	6,200
Fancy (5)	3,200	Roann (2)	32,100
Harvest (1)	400	St. George (3)	6,500
Intrepid (2)	3,600	Seraphina (3)	8,300
Janet Elsei (3)	8,600	Sheilah Ann (1)	500
Jenny (1)	21,000	Sonny & Joyce (2)	5,500
Little Lady (7)	8,400	Southern Cross (2)	8,700
Little Sam (4)	50,800	Theresa (1)	2,600
Lynn (3)	17,500	Three Bells (1)	4,800
		Verjoy (2)	1,800
		Viking (2)	7,900
		Winifred M. (1)	5,200

Scollop Landings (Lbs.)

Lauren Fay (1) 10,100

Swordfish Landings (Lbs.)

Bridget Ann (1)	400	Mary C. (1)	1,300
Gertrude D. (1)	2,000	Natator (1)	700
H. Slater (1)	500	Papoose (1)	1,200
Ingrid (2)	700	Three Bells (2)	6,000

BOSTON (Mass.)

Acme (4)	46,100	Michael G. (1)	9,500
Agatha & Patricia (2)	55,400	Michigan (2)	252,400
Angie & Florence (3)	65,400	Nancy B. (2)	62,200
Annie & Lucy (1)	12,700	Nautilus (2)	123,300
Arlington (4)	540,000	New Star (3)	260,500
Atlantic (2)	181,400	Notre Dame (3)	124,000
Baby Rose (3)	148,000	Ocean Clipper (1)	41,200
Bay (3)	287,600	Ocean Wave (1)	53,400
Bonnie (3)	359,400	Ohio (2)	187,600
Bonnie Billow (2)	205,400	Olympia LaRosa (3)	142,600
Bonnie Breaker (3)	273,300	Pam Ann (3)	286,500
Brighton (3)	325,300	Patty Jean (2)	266,800
Buzz & Billy (3)	137,400	Phantom (3)	399,800
Cambridge (2)	258,000	Plymouth (1)	40,900
Caracara (2)	117,300	Princess (1)	25,400
Carmela Maria (3)	22,900	Racer (2)	210,500
Carmen & Vince (3)	143,800	Raymonde (4)	245,500
Cigar Joe (3)	108,200	Red Jacket (3)	409,500
Columbia (1)	65,700	Regina Maria (2)	91,400
Comet (3)	269,600	Rosa B. (2)	208,400
C.R. & M. (1)	23,300	Rosie (4)	78,600
Dolphin (3)	93,400	Rush (3)	287,100
Edith L. Boudreau (3)	94,900	St. Angelo (2)	38,000
Elizabeth B. (4)	284,900	St. Joseph (1)	30,200
Ethelena (4)	150,900	St. Marco (3)	103,800
Evelina M. Goulart (1)	52,800	St. Rosalie (4)	153,300
Flying Cloud (3)	563,800	St. Victoria (2)	108,600
Four (3)	268,000	Santa Maria (2)	67,400
Geraldine & Phyllis (3)	157,600	Santa Rita II (2)	39,500
Jane B. (3)	304,500	Stanley B. Butler (2)	138,800
J. B. Junior (3)	318,100	Star of the Sea (4)	142,100
Jeanne D'Arc (1)	68,000	Star of the Sea (N.B.) (1)	25,900
Josephine P. II (4)	105,100	Terra Nova (3)	307,500
Lady of Good Voyage (3)	103,200	Texas (3)	229,700
Lady of the Rosary (1)	36,800	Thomas D. (4)	131,700
Leonard & Nancy (3)	121,200	Thomas Whalen (2)	150,400
Manuel F. Roderick (4)	214,500	Tina B. (2)	72,100
Mary & Joan (3)	241,100	Villanova (4)	152,400
Mary Ann (4)	149,500	Weymouth (3)	320,400
Mary Rose (3)	128,000	Wild Duck (2)	82,900
M. C. Ballard (3)	184,300	William J. O'Brien (4)	379,800
Michael & Grace (1)	23,900	Winchester (2)	272,500
		Wisconsin (2)	286,300

Swordfish Landings (No. of Fish)

Christine & Dan (2)	145	Mary E. D'Eon (1)	80
Gertrude D. (1)	108	Papoose (1)	42

STARR NYLON NETTING

Brings
your
average up!

You'll like EVERYTHING about STARR Nylon Netting, made only from 100% Du Pont Nylon. You'll like the way it lets you fish easier and longer! You'll like its amazing lightness but at the same time you'll respect its rugged, dependable performance. You'll like how it feels and stays dry-ready for action whenever you choose. And most of all—you'll point with pride to your STARR Nylon Netting because it's brought your catch average up.

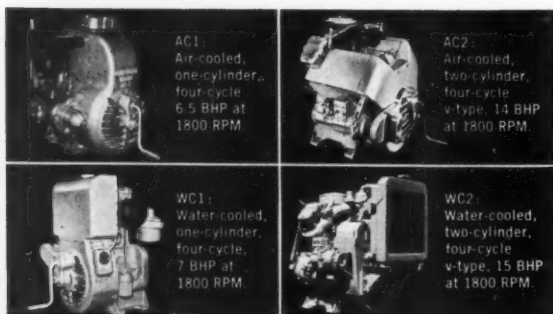


STARR NETTING...
STAR PERFORMANCE

A. M. STARR NET CO.
EAST HAMPTON, CONN., U.S.A.

THE BIG 4 IN DIESEL POWER

AMERICAN MARC Inc. dominates the field of lightweight, low-horsepower Diesels by building its diversified line from the "Big Four" basic models illustrated here. Purchase and maintenance of engines and parts are simplified by the use of these compact and rugged prime movers.



AMERICAN MARC also manufactures Diesel generating plants from 3 to 10 KW (AC or DC, and industrial three-phase), Diesel pumping units from 48 to 1700 GPM, marine propulsion, refrigeration units and power-packages for other services. American MARC can adapt any of its Big 4 engines to fit every job requiring from 5 to 20 BHP.

INQUIRIES ARE INVITED FROM DISTRIBUTORS AND DEALERS

AMERICAN MARC INC. DIESEL ENGINES

1601 West Florence Ave.
Telephone OR 8-7174



Dept. NF-97
Inglewood, Calif.

AMERICA'S LARGEST MANUFACTURER OF AIR-COOLED DIESELS



WITH COLUMBIAN PROPELLERS THEY'RE FIRST CHOICE OF FLEET OWNERS



- because they help give
- full power and faster runs
 - more fishing or dragging time
 - more productive work hours
 - a headstart reaching the market
 - fewer lay-ups for refitting and repair

They are YOUR ONE BEST BUY for lasting satisfaction!
For new equipment and refitting, be sure to specify
propellers and fittings from

COLUMBIAN BRONZE CORP.

FREEMONT, L.I. NEW YORK



GLOUCESTER (Mass.)

Admiral (3)	195,000	Lady of the Rosary (3)	162,000
Agatha (1)	112,000	Linda B. (5)	130,000
American Eagle (7)	303,500	Little Flower (13)	521,700
Andrea G. (2)	225,000	Little Joe (4)	49,000
Anna Guarino (12)	80,000	Lone Ranger (1)	9,000
Ann & Marie (11)	28,500	Luckimee (1)	225,000
Annie (13)	80,000		
Annie & Josie (1)	500	Maloio (2)	110,000
Anthony & Josephine (2)	75,000	Manuel P. Domingoes (1)	130,000
Atlantic (3)	205,000	Margaret Marie (6)	168,000
		Marianna II (9)	399,000
Bonaventure (5)	588,000	Mary Anna (1)	5,000
Bonnie Billow (1)	1,000	Mary Jane (2)	177,000
		Morning Star (9)	449,500
Cape Cod (5)	91,500	Mother Ann (2)	485,000
Carlannus (3)	11,000		
Carlo & Vince (10)	515,100	Nancy & Maria (8)	145,500
Catherine B. (12)	886,000	No More (5)	5,100
Cigar Joe (3)	27,000	North Sea (2)	345,000
Clipper (2)	310,000		
Columbia (1)	1,500	Ocean Spray (3)	145,000
Curlwe (2)	300,000	Ocean Wave (2)	27,000
Cushman (1)	210,000	Olympia (10)	651,000
		Our Lady of Fatima (1)	200,000
Dawn (9)	50,000		
Doris F. Amaro (2)	89,000	Peggy Belle (2)	1,500
Dragnet (2)	76,000	Phyllis A. (1)	4,000
		Pioneer (15)	31,500
Eagle (6)	1,074,500	P. K. Hunt (1)	125,000
Eddie & Lulu M. (2)	4,000	Powhatan (3)	163,000
Emily H. Brown (2)	370,000	Priscilla (4)	8,500
Estrela (2)	440,000	Prosperity (13)	52,500
Etta K. (1)	1,000		
Eva II (5)	14,000	St. Anna Maria (12)	656,500
Evelyn C. Brown (2)	520,000	St. Anthony (4)	590,000
		St. John (5)	11,000
Falcon (20)	160,500	St. Joseph (3)	137,000
Florence & Lee (1)	180,000	St. Mary (13)	462,600
Flow (2)	455,000	St. Nicholas (1)	175,000
Frances R. (11)	478,000	St. Peter (8)	545,500
Frankie & Jeanne (4)	10,500	St. Peter III (7)	375,000
		St. Providence (10)	70,500
Gaetano S. (2)	280,000	St. Stephen (9)	63,000
Gertrude E. (4)	6,100	St. Teresa (7)	306,000
Giacoma (15)	47,500	St. Victoria (1)	3,000
Golden Dawn (3)	111,000	Salvatore & Grace (4)	50,000
Golden Eagle (2)	255,000	Santa Lucia (9)	62,000
		Sea Hawk (1)	125,000
Helen B. (2)	28,000	Sea Queen (3)	166,000
Holy Family (3)	359,000	Sebastiana C. (7)	544,000
Holy Name (12)	539,000	Serafina II (4)	126,000
		South Sea (1)	42,000
Immaculate Conception (12)	468,500	Sunlight (2)	220,000
Irene Y. (2)	310,000	Swallow (2)	360,000
Irma Virginia (1)	5,000		
		Theresa M. Boudreau (2)	395,000
Jackie B. (4)	132,000	Tina B. (1)	75,000
Jackson & Arthur (8)	49,000	Topsy Parson (18)	44,000
J. B. Jr. (1)	85,000		
J. B. N. (7)	73,500	Victoria (5)	3,000
Joseph & Lucia (9)	1,570,000	Villanova (2)	425,000
Joseph S. Mattos (2)	400,000	Vincie N. (5)	450,000
Josie II (8)	45,500	Virginia Ann (5)	80,500
Judith Lee Rose (2)	520,000		
		White Owl (1)	500
Kingfisher (2)	400,000		

Scallop Landings (Lbs.)

Stephen R. (2) 22,000

PORTLAND (Me.)

Agnes & Elizabeth (3)	205,000	Medan (1)	280,000
Alice M. Doughty II (4)	179,000	Mocking Bird (3)	183,000
Andarte (3)	318,000		
		Ocean Life (2)	615,000
Bobby & Jack (1)	70,000		
Challenger (5)	61,000	Quincy (2)	331,000
Crescent (9)	169,000		
		Resolute (3)	210,000
Dorchester (1)	180,000	St. George (1)	190,000
Dorothy & Ethel II (3)	105,000	St. Joseph II (4)	126,000
		St. Michael (4)	19,500
Elinor & Jean (5)	140,000		
		Theresa R. (3)	316,000
Gulf Stream (1)	135,000		
		Vandal (2)	81,000
Lawson (3)	181,000	Vida E. II (3)	41,000
Mary & Helen (5)	63,600	Wawenock (2)	425,000
		Winthrop (1)	175,000

STONINGTON (Conn.)

America (15)	58,800	Jane Dore (17)	21,900
Averio (12)	6,600		
		Lt. Thos. Minor (13)	6,800
Bette Ann (15)	22,000	Lisboa (3)	1,100
Carl J. (16)	54,700	Marise (19)	13,200
Carolyn & Gary (17)	38,800		
Connie M. (18)	27,600	Old Mystic (7)	5,900
Fairweather (16)	36,800	Rita (6)	23,800
Five Sisters (4)	5,400		
		Theresa (8)	21,100
Irene & Walter (15)	17,200		
		William B. (17)	31,800

NEW BEDFORD (Mass.)

Adventurer (4)	63,400	Kelbarsam (2)	18,200
Angeline (2)	6,600	Lorine III (1)	29,000
Annie Louise (4)	27,600	Major J. Casey (3)	72,200
Annie M. Jackson (3)	49,000	Marie & Katherine (3)	96,200
Austin W. (2)	54,000	Mary Tapper (3)	91,700
Barbara M. (2)	46,000	Melvina B. (1)	20,600
Cap'n Bill (4)	52,100	Midway (2)	78,500
Cap'n Bill II (3)	82,200	Minkette (1)	2,000
Carl Henry (2)	43,000	Molly & Jane (3)	40,000
Charles E. Beckman (4)	54,200	Nautilus (1)	61,500
Charlotte G. (4)	77,200	Pauline H. (4)	273,300
Christina J. (3)	87,200	Phyllis J. (2)	29,800
Comber (3)	29,600	Revenge (1)	9,200
Connie F. (2)	23,000	Roann (1)	24,500
Eiva & Estelle (2)	14,400	Roberta Anne (3)	47,500
Falcon (1)	32,500	Rosemarie V. (4)	91,600
Gannet (3)	94,300	Ruth & Helen (2)	22,600
Gladys & Mary (3)	83,700	Ruth & Nancy (4)	61,000
Growler (2)	46,500	Sea Rambler (3)	39,000
Harmony (3)	48,600	Solveig J. (2)	93,500
Hope II (3)	42,500	Stella Maris (3)	51,600
Invader (2)	70,500	Sunbeam (2)	29,300
Ivanhoe (2)	33,000	Susie O. Carver (3)	25,100
Jacintha (2)	90,000	Two Brothers (4)	28,900
Janet & Jean (3)	85,900	Venture I (2)	68,000
Joan & Tom (4)	81,200	Victor Johnson (3)	66,000
Julia DaCruz (1)	26,900	Viking (2)	72,400
Katie D. (3)	158,500	Whaler (3)	111,000

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Aloha (3)	33,000	Louise (3)	33,000
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Amelia (3)	33,000	Lydia Warren (1)	7,600
Babe Sears (2)	22,000	Malene & Marie (2)	22,000
Baltic (3)	33,000	Marjorie M. (2)	11,500
Barbara & Gail (1)	11,000	Marmax (2)	19,500
B. Estelle Burke (2)	22,000	Mary Anne (2)	22,000
Bobby & Harvey (2)	20,500	Mary J. Hayes (2)	22,000
Brant (2)	22,000	Mary J. Landry (2)	22,000
Bright Star (2)	22,000	Michael F. Densmore (1)	11,000
Brother Joe (2)	13,900	Miriam A. (2)	18,000
Carol & Estelle (3)	33,000	Monte Carlo (3)	30,000
Catherine & Mary (3)	33,000	Moonlight (3)	33,000
Catherine C. (3)	33,000	Muskegon (2)	22,000
Charles S. Ashley (2)	22,000	Nancy Jane (2)	22,000
Clipper (2)	22,000	Nellie Pet (3)	33,000
Dartmouth (3)	33,000	New Bedford (2)	22,000
Debbie Jo-Ann (1)	11,000	Newfoundland (3)	31,500
Debra & Joan (1)	11,000	Noreen (2)	22,000
Dorothy & Mary (2)	22,000	Norseman (1)	11,000
Edgartown (3)	32,200	Pearl Harbor (3)	33,000
Eleanor & Elsie (2)	22,000	Pelican (2)	22,000
Elizabeth N. (3)	33,000	Porpoise (2)	22,000
Empress (1)	11,000	Richard Lance (2)	22,000
Enterprise (3)	33,000	Rita B. (1)	11,000
Eugene H. (2)	22,000	Rosalie F. (2)	22,000
Eunice-Lillian (2)	22,000	Rush (3)	33,000
Fairhaven (2)	22,000	Ruth Moses (3)	33,000
Falcon (1)	4,000	Sea Ranger (2)	22,000
Flamingo (2)	22,000	Sippican (2)	22,000
Fleetwing (3)	33,000	Smilyn (3)	31,300
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Lucky Star (1)	38,000	Vansee (1)	45,000
		Yakutat (1)	45,000
		Zenith (1)	52,000

Pacific Oyster Convention

(Continued from page 13)

Pacific Oyster Growers Grant

Telling of research work, Malcolm B. Edwards, stated that "The Pacific Coast Oyster Growers Association has earmarked \$1,000 per year as a grant to a Japanese university for research work on oysters. The principal purpose behind the research will be to develop better methods of catching, hardening, and processing seed oysters.

"The first phase of the study will deal with hardening. For many years oyster seed has been hardened (conditioned for shipment to America) by placing it near the 2/3 tide mark soon after catching, the theory being that exposure to air and colder temperatures at the higher tide levels slow the growth and force the oyster to build a thicker and tighter shell. Observations I have made in Japan in the past several years indicate from 20 to 50% of the seed is killed during the hardening stage. Part of this loss is due to action of predators such as flatworms and drills, yet I believe the major loss is caused by long exposure of the seed to warm temperatures in the first two months of the hardening process.

"The research will be designed to determine what takes place during hardening. Is it a necessary part of the operation? If so can we develop a technique to harden seed that will cut the death due to hardening to a minimum. This will increase our quality, which will help us, and should lower the number of strings of shell needed to make an acceptable case of seed, thereby helping the Japanese."

Refrigeration Necessary for Fresh Oysters

"Two factors of importance in considering the storage of fresh, shucked oysters are the speed of cooling after shucking and the temperature of storage, commented Dr. Joseph W. Stern, Professor, School of Fisheries, University of Washington. He continued: "Without considera-

tion of these factors, it is possible that oysters can become an undesirable and even dangerous food product.

"The best initial means of avoiding bacterial spoilage and the associated dangers is the minimizing of contamination via clean growing areas and careful sanitation during processing. Proper refrigeration is necessary for keeping bacterial growth at a minimum level until the product has reached the consumer.

"To summarize the results of experiments with shucked Pacific oysters, the samples held in storage at 53°F. were unacceptable after three to five days; those held at 46°F. were unacceptable after seven or eight days; while those stored at 36°F. and on ice were still acceptable after sixteen days of storage.

"It is apparent that temperature is an important factor with respect to the rate of spoilage of fresh shucked oysters. Rapid cooling and lower temperatures (in the neighborhood of 32°F.) will prolong the storage life while slow cooling and higher storage temperatures will be conducive to rapid spoilage and a short-shelf life."

Techniques For Oyster Larval Rearing

W. P. Breese, biologist at the Oregon State College Shellfish Laboratory, Yaquina, described techniques in oyster larval rearing. He stated: "Rearing of native oyster larvae was undertaken at the Oregon State College Fisheries Research Laboratory to demonstrate, if possible, laboratory seed production. As yet no reliable large scale seed production method has been demonstrated. However single rearings on occasion have produced sets of commercial intensity.

Seasoned Douglas fir tanks with a capacity of 250 gallons and seasoned concrete tanks of the same capacity are being used. Three and five gallon wide-mouth glass jars also may be used as aquaria to successfully rear native oyster larvae.

"A filtering device, using sand as the filtering agent, is used in two ways in rearing oyster larvae. The water used in the aquaria is filtered through sand before use and, to achieve a water change, it is filtered out of the aquaria so the larvae are not lost.

"The parts of the filter are a crock, sand, glass wool, bottle without bottom, and a siphon. The water in the crock filters down through the sand and up into the bottle and out the siphon. The sand is prevented from siphoning over by the glass wool. A vacuum may be attached in place of the siphon and the filtered water collected in carboys placed in the vacuum line.

"The rearing water is filtered before being put into the aquaria. A salinity of about 25 parts per thousand is workable and the water temperature is controlled at 20 degrees Centigrade. Air is bubbled from the bottom of the rearing container to insure water circulation.

"A culture which may, either directly or indirectly, provide food for the larvae is introduced into the rearing container. A liter of this culture is added to a 250-gallon tank every other day. The culture consists of protozoa and other organisms smaller than nine microns which are grown in a medium (predominately starch).

"Larvae of the native oyster are obtained by opening adult oysters and removing the larvae. This method is, of course, restricted to the natural spawning season. At other times it is often possible to condition the adult oysters and induce them to spawn. Larvae from the Pacific oyster are obtained by inducing the adult oyster to spawn.

"A rearing experiment is usually conducted as follows: A tank is cleaned and rinsed with hot water. A filtering device, in a small crock, is placed in the tank and then the tank is filled with filtered salt water. An air line is installed. Oyster larvae are taken from the adult and held a day or two to insure viability and then put into the tank. The larvae are measured at the beginning of the experiment and at two or three day intervals.

"One liter of culture is added every other day, and once a week 75 gallons of water are removed via the filter and replaced with filtered salt water. Culch is added when the first larvae reach about 250 microns in size, measured parallel to the hinge. The test is over when no free swimming larvae can be found."

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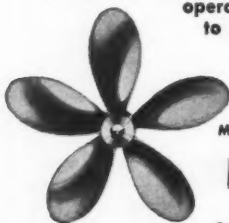
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Rhode Island Expects Best Scallop Harvest in Years

After taking samples on both sides of Narragansett Bay, state conservation officers said recently that the scallop crop in the Bay this year should be the best in years.

The tests also showed that seedlings spawned last June promise an even better crop when they mature in 1958.

Kickemuit River in Bristol which has not had worth while sets in recent years, is expected to yield a fair harvest this year.

The conservation department was to conduct tests before the season opened on September 15 to give commercial fishermen an idea of where the best spots for fishing are located.

Oysters Scarce, Prices High

The outlook for the oyster season which opened on September 1 is for oysters to be scarcer than ever with prices very high.

Beds on which oysters used to fatten, notably in the Warren area were damaged by hurricanes and the damage has not yet been repaired.

According to Wilfred Talbot, manager of the Warren Oyster Co., the sole remaining wholesaler on the bay, there is one consolation—the oysters are meatier than ever.

Landings Show Increase

Landings of commercially-caught fish and shellfish at Rhode Island ports during May amounted to 20.9 million pounds valued at \$510,000. This was an increase of 295,000 pounds when compared with the corresponding month of last year. Leading items were fish for industrial use, scup, squid, hard clams and blackback.

Shrimp Trawler Design

(Continued from page 11)

this results in a dangerous situation which has been responsible for many serious accidents to crew members.

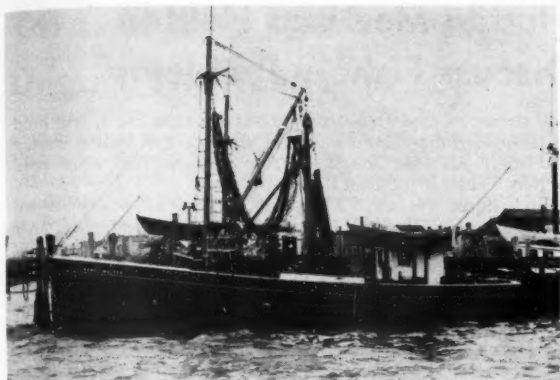
Construction methods and scantlings have not varied greatly over the years, and the specifications are nearly the same for both large and small shrimpers. Many of the boats are underpowered, which is a factor affecting trawling efficiency and the time spent proceeding to and from the fishing grounds.

How Lines Could Be Improved

The present shrimp trawler hull form should be altered and refined in accordance with the latest scientific and technical knowledge. The forward sections should be made finer, with an effective flare topside to provide a dry bow with ample reserve buoyancy. Tank tests do not indicate that a V-bottom hull could be used to advantage. The midship sections should be hardened at the turn of the bilge to overcome excessive rolling. The run aft must be flatter to provide better speeds and less critical changes in trim when loaded.

Ample power should be installed to enable free running speeds up to 10 to 11 knots, and more effective towing speeds. A single screw with a variable pitch propeller has been the solution in other fisheries facing the same problems.

Preferably, the deckhouse and quarters should be moved aft, leaving the waist open as a working deck, assuring easy, visual and vocal communication between it and the wheelhouse. The single mast then could be stepped forward of the midsection, and the present Florida rig, which is efficient in its needs for manpower, could be easily adapted, with minor improvements, for use in this new position. Crew's quarters should be located topside, if possible. Below, the engine room should be well



Walter Schroeter's 58' dragger "Irene and Walter" of Mystic, Conn. She is powered with 100 hp. Caterpillar Diesel with 2:1 Twin Disc reduction gear and 40 x 32 Federal propeller. Other equipment includes Willard batteries, Bendix depth sounder, RCA Radiomarine radiotelephone, Danforth anchor, Ritchie compass, Tiger Brand wire rope, Wilcox nets and Hathaway winch. The vessel uses Esso lubricating oil.

aft, and an insulated, refrigerated hold provided amidship near the center of buoyancy.

The seasonal incidence of successful shrimp catches indicates that careful consideration should be given to the development of a dual-purpose vessel, capable of being used in other fisheries, as well as shrimping, without changing or adding to the crew. Experimental work now being conducted in the Gulf of Mexico and the Caribbean will be of assistance in solving this problem.

A newly-designed vessel, as outlined above, would rectify many of the shortcomings of the present shrimpers and could be constructed at an initial cost comparable to that of the Florida type. Such a vessel could be either of steel or wood. In either case, scantlings and construction methods should be revised to produce a vessel capable of successful operation for a period of from 15 to 20 years.

Florida Mullet Canning

(Continued from page 13)

Other fishermen in the Tampa-Sarasota area express themselves: "Prior to the advent of the Tucker cannery, we could only work 2 days a week, average 3 days, then we had to quit because the market was glutted. It's a different story now that we can unload every catch, regardless of size."

Ted Rye, who fishes Sarasota and surrounding waters, said: "Now during the mullet season, I call up Tucker's and ask them how many they can use. Then we fish all night and deliver them in the morning, getting a price that pays us. Before the Tucker cannery opened, we had to take whatever price the fish dealers wanted to pay. This often meant the very lowest price or the alternative of quitting our search for mullet and laying off our crews."

Abundant Supply of Mullet

Florida produces 75 percent of all mullet caught in the United States, and officials estimate there is an abundant supply. The black mullet is a vegetarian and not a scavenger fish. It feeds on minute algae and doesn't soften up, which means it requires no oil to keep it succulent. A major portion of the life of the black mullet is spent in the coastal bays and inlets that abound on the Florida coast, and migrations of the fish seldom exceed 20 miles.

Mullet was once Florida's first food fish, although in 1955 it was a poor second to shrimp, with a value of 2.2 million. The Tucker cannery is expected to improve this picture for commercial fishermen by helping to resolve their mullet marketing problems.

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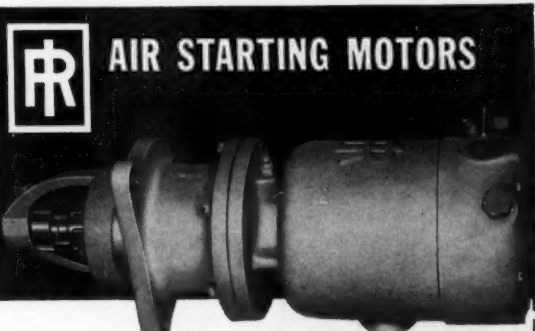
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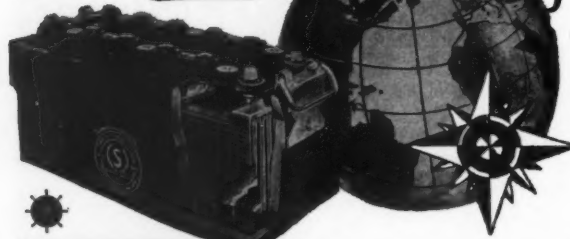
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Florida Meetings Held to Discuss Fishery Problems

A series of meetings throughout Florida are being held to discuss the problems of the shrimp and fish industry and their possible solutions. Recent meetings were held in Key West, Miami and Fort Myers.

On August 19, John Ferguson, president, Southeastern Fisheries and Shrimp Association of the Americas met with Charlie Bevis in West Palm Beach to begin a series of similar meetings up the Atlantic coast as far north as Brunswick, Ga.

Problems of the shrimp industry are not too many at this time. Passage on May 23 of the bill enabling the State Conservation Department to declare "off limits" sections of Tortugas shrimp beds, is an experiment to prevent the taking of small shrimp and depletion of rich shrimp beds and results will not fully be known for two years. The industry is hopeful that this will not only produce larger shrimp, but more of them.

Also lightening the problems of shrimp boat owners is the system of handling funds through cooperation of the shrimp industries of Mexico and the United States. A central banking system has been set up in Brownsville, Texas. Mexico now has a Chamber of Commerce of the Fishing Industry. In case a boat from Florida has a mechanical breakdown or a crew member is injured or becomes ill, the Chamber of Commerce of Mexico pays the bill for repairs or treatment. The Shrimp Association of the Americas through a special fund reimburses the Chamber of Commerce and bills Southeastern Fisheries for the amount. In turn, Southeastern Fisheries bills the owner of the boat.

Most of the boats from Fort Myers Beach are in Texas now, with approximately 50 boats fishing in those waters. Fishing is normal and prices are up.

Frozen Vacuum Packed Mullet on Market

Frozen, vacuum packed mullet has been introduced in Florida. The new product, which is aimed at getting a larger market for mullet, is being produced by Jacksonville Freezers.

One vacuum machine is already in operation by the firm and two more are to be put in use.

Some time ago the Fish & Wildlife Service and the State of Florida launched a cooperative program to study the mullet industry and see what could be done to return it to its one-time peak.

The Marine Laboratory of the University of Miami was commissioned to do the study and the marketing of frozen mullet was one of the answers they came up with.

Oyster Cultivation Project Underway

Work is progressing on an oyster transplanting, cultivation and experimental project in Wakulla County which is expected to last for approximately three months.

Conservation agent Vernon Thomas and crew have been busy moving oysters from salty areas and coon reefs into bays, bayous and creeks. Later transplants will be made in the Eastern part of the county and around the mouth of the St. Marks River.

Ernest Mitts, conservation Department director and R. M. Ingle, assistant director and chief biologist report that they are going to do their best in protecting the beds which they believe will make the project a successful one and give plenty of people employment.

Report on Shrimp Exploration

During July the research vessel *Combat* continued deep-water shrimp exploration along the east coast of Florida. Royal Red shrimp were caught in all successful drags in the 160-250 fathom zone along the western edge of the Florida Current. Catches along the Bahamas did not yield a single Royal Red shrimp. Bottom temperatures in this area ranged from 6 to 14° warmer than in comparable depths along the western edge of the Florida Current.

Texas Shrimp Landings High Despite Hurricane

In spite of a week lost due to hurricane Bertha 7.2 million pounds of headoff shrimp were landed at principal ports in the 30-day period ending August 23, an increase of 2.6 million pounds over the previous 30-day period. Aransas Pass area led all other ports in landings, with Brownsville and Port Isabel close contenders.

The second hurricane of the year on the central and western Gulf of Mexico, interrupted fishing and shrimp-operations and sent fishing boats into ports all along the Texas coast.

During the first six months of the year shrimp landings at principal Texas ports totaled 11.8 million pounds as compared with 7.5 million pounds during the same period last year.

Small trawler operators are now looking forward to better fall runs of white shrimp in the bays after the opening September 1.

Must Change Ice-Melting Methods

The Shrimp Association of the Americas and the Texas Shrimp Assoc. has been cautioned by the Texas State Department of Health, that the practice of pumping water from harbors and channels to melt ice on shrimp in the hold of vessels before unloading shrimp will no longer be tolerated, and punitive action will be taken against anyone using such water for this purpose. The dockside water is consistently found to have a high bacterial count besides being loaded with oil and other material, according to the Health Department.

Shrimp producers were also told that the use of sodium-bisulphite dip on shrimp as a deterrent to black spot, must meet stringent state and federal regulations. Shrimp so treated must be identified, by labels and tags, on packaged or boxed shrimp, stating that sodium bisulphite has been used, and notices on bulk shrimp invoices advising the purchaser of the bisulphite treatment used.

Sixth Annual Shrimp-O-Ree

The Sixth annual Shrimp-O-Ree was held on the Aransas Pass waterfront on August 30 with Capt. James Wilder of the shrimp trawler *Jimmie and Renie* as king. Capt. Wilder defeated Roger Hagen, sponsored by Casey's Seafood; Al Wilkerson, entry of Webster Seafood and A. N. Garrett; and Tony Tamburin, Sr. of the Tamburin Fish Co. Capt. Wilder fishes out of Tringali, Inc., the firm which sponsored him, and he has been associated with the fishing industry for some 15 years. Winner of the title of Miss Shrimp-O-Ree was Sue Ramey of Aransas Pass.

Other events of the four-day fiesta included cyclecade races, street parades, a shrimp boil, the Shrimp-O-Ree ball, Blessing of the Fleet ceremonies and air-sea rescue exhibitions.

Blessing of the Fleet ceremonies were under the leadership of the clergy and congregation of St. Mary's Star-Of-The-Sea.

New Causeway Being Protested

Plans for a new causeway between Aransas Pass and Port Aransas, is being protested by many of the business people of the city. The main complaints arise from the Highway Commission's proposal to close the channel in front of the Aransas Pass seawall and substitute a 30-inch pipe through the roadway fill. Objectors point out the inconvenience to boat owners by such a change.

A. N. Garrett, a city councilman and marine station operator, as well as Bill Peer, James Johnson and John Nelson, all seafood operators, recommend a bridge over the channel in place of the pipe and another bridge to serve the Gulf Coast Marine Ways in the immediate vicinity.

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Wolverine Marine Dept., The Coulter & McKenzie Machine Co., 35 Union Ave., Bridgeport 3, Conn.

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INSULATION

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Federal Propellers, Grand Rapids, Mich.

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Stroudsburg Engine Works, 62 North 3rd St., Stroudsburg, Penn.

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John A. Roebling's Sons Co., Trenton 2, N. J.
Wickwire Spencer Steel Division of The Colorado Fuel & Iron Corp., Palmer, Mass.

FOREIGN BAILINGS

CANADA FINDS NEW SCALLOP beds on southern St. Pierre Bank. The beds are in 24-26 fathoms, small but with a high concentration of scallops. Commercially profitable catches have been made.

KIEL GERMANY WILL MAKE first large scale test of coastal fishing with electrical devices. The fish will be lured in to nets with an electrical field. Tests have been made for tuna with electrical fishing lines.

NORWEGIAN WHALING COMPANY reports antibiotics, injected into whales at time of harpooning, have kept meat fresher longer. The yield of best grade oil has been boosted 70-90 percent. The company's chief chemist says oil shows no trace of antibiotics and by-products of treated whales are of higher quality.

SCOTTISH AND IRISH WHITE fish landings may bring a guaranteed minimum for all landings. Payments will be financed by a levy on fish and proceeds of the disposal of surplus fish. The scheme is designed to improve marketing and insure better use of surplus edible fish on days when the market is oversupplied.

COPENHAGEN IS HOST to the second International Trade Fair from September 27 through October 6. Thirteen countries will present displays of fish, fishery products, nets, navigation equipment, engines, machinery connected with the fisheries trade, etc. An up-to-date filleting plant, showing the latest production methods, will be exhibited.

THOUGH ECUADOR'S REVENUE from licenses granted to the U. S. tuna vessels declined drastically in 1956, due to the high cost of license, restrictions on foreign privileges, Japanese competition, and a change in the U. S. tuna fleet's habits, established fishing companies (Mostly U. S. owned) remained active.

MARITIME LANDINGS DURING July amounted to 93.9 million pounds valued at \$3.3 million, an increase in volume over June of 5.3 million pounds but a drop in value of \$1.6 million. The decline in returns was due to scarcity of the highly priced species such as lobster.

UNION OF SOUTH AFRICA expands research facilities to study the pilchard and massbanker. Twelve new buildings, now being built, will be devoted to biological research and 8 existing laboratories will conduct physical and chemical oceanographic research. South-West Africa is combining with the Union in the program because of the importance to west coast fishermen, who receive about 2 million (U.S. \$4 million) annually from the fish.

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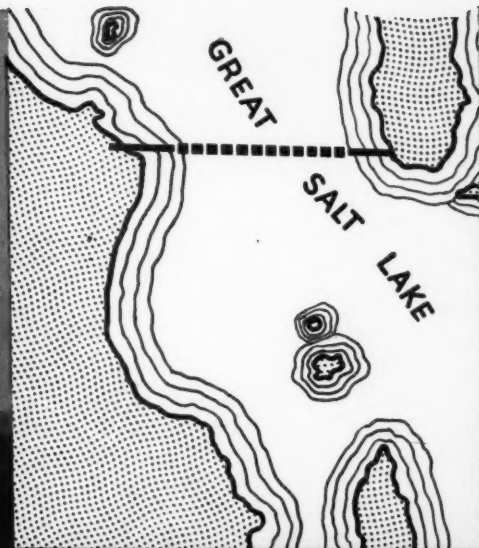
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MBER, 1957

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24 FOOT, STEEL HULL PERSONNEL BOATS, BUILT BY MARINE CONSTRUCTION AND DESIGN CO., POWERED BY CHRYSLER.



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America's No. 1 Marine Engine

MARINE ENGINE DIVISION • CHRYSLER CORPORATION

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*Power Steel Personnel Boats
on the Great Salt Lake Fill Project*

THE REQUIREMENTS WERE TOUGH:

Boats must carry ten men with full equipment and a radio at speeds above 24 M.P.H. (Work crews are paid from the time they leave shore.) Boats must also double as odd-job utility boats. Engines must operate at near mile high altitudes in dense salt water with minimum power loss. Engines must also operate economically with minimum maintenance. (Down time costs money.)

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Dept. 9K, Marine Engine Division
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